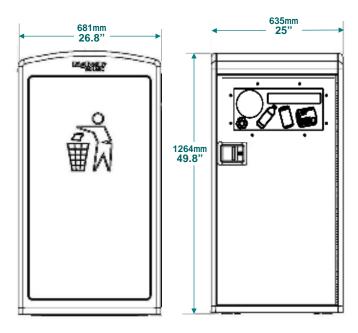
### **Smartbelly® Standard Capacity Station**



Configurations: Mixed waste or single-stream recycling (with appropriate markings)

### **Materials**

RoHS compliant

Galvanized sheet metal steel interior and exterior construction

Heavy duty plastic side panels for dent and scratch resistance (recycled content)

Interior Bin: Single bin is leak proof made out of low density polyethylene plastic

### **Power & Electronics**

Polycrystalline silicon cell PV module (22 watts). (40 watts HE [high energy] upgrade available)

PV panel protected by polycarbonate bubble

Spill-proof, sealed maintenance-free battery

Self-powered unit requires no wiring

### **Technical Specifications (SB5)**

### **Overall Machine Dimensions**

Height: 49.8" (1264mm)

Width: 25" (635mm)

Depth: 26.8" (681mm)

Weight: 175 lbs (80kg); Shipping weight: 205 lbs (136kg)

Insertion Opening: Can be configured for multiple recycling or waste

streams.

Bin Volume: 50 gallons (189L)

### **Features**

Fully automated, microprocessor controlled system senses fullness and machine status

LED status indicate fullness level, machine status and error codes

GPRS or CDMA wireless data link for remote monitoring and management

GPS assisted location service

### Safety Features

CE approved

Fully interlocked access doors protect users and service personnel

Locked front trash removal door. (Locked rear door option available)

Separately keyed service access

### Durability

Weather resistant, UV stabilized polyester powder-coat finish on all exterior parts

Electronic components temperature range of -40°F to +185°F (-40°C to +85°C)

Fully weatherized, but in the event of a flood, Smartbelly can withstand up to 40" (1.06m) of water without harming electronics

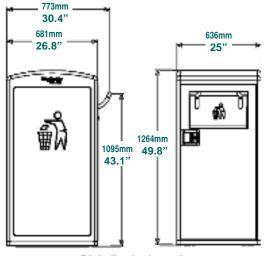
Bigbelly Solar, Inc. 150 A Street – Suite 103 Needham, MA 02494 USA

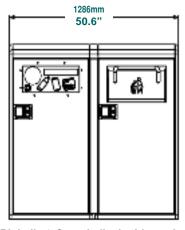


Sales@Bigbelly.com Bigbelly.com Toll-free: +1 888.820.0300 International: +1 781.444.6002 FAX: +1 781.444.5651

Info\_TechSpecs(SB5)\_2016Mar

### **Station Dimensions**





1935mm 76.2"

Bigbelly single station
Approximately 270 lbs (123kg)

Bigbelly single station

Bigbelly & Smartbelly double station Approximately 445 lbs (202kg)

Bigbelly & Smartbelly triple station
Approximately 610 lbs (277kg)

Bigbelly <sup>®</sup> High Capacity	Smartbelly <sup>®</sup> Standard Capacity	Smartbelly <sup>®</sup> Companion
49.8" (1264mm)	49.8" (1264mm)	49.8" (1264mm)
25" (635mm)	25" (635mm)	25" (635mm)
26.8" (681mm)	26.8" (681mm)	26.8" (681mm)
43.1" (1095mm)	-	-
270 lb (122kg)	175 lb (80kg)	164 lb (75kg)
300 lb (136kg)	205 lb (93kg)	205 lb (93kg)
12V	12V	-
6" x 17" (15.2cm x 43.2cm)	Can be configured for multiple recycling or waste streams.	Can be configured for multiple recycling or waste streams.
33 gallons (125L) compacted; 150 gallons uncompacted	50 gallons (189L)	50 gallons (189L)
	High Capacity  49.8" (1264mm)  25" (635mm)  26.8" (681mm)  43.1" (1095mm)  270 lb (122kg)  300 lb (136kg)  12V  6" x 17" (15.2cm x 43.2cm)  33 gallons (125L) compacted;	High Capacity       Standard Capacity         49.8" (1264mm)       49.8" (1264mm)         25" (635mm)       25" (635mm)         26.8" (681mm)       26.8" (681mm)         43.1" (1095mm)       -         270 lb (122kg)       175 lb (80kg)         300 lb (136kg)       205 lb (93kg)         12V       12V         6" x 17" (15.2cm x 43.2cm)       Can be configured for multiple recycling or waste streams.         33 gallons (125L) compacted;       50 callage (490L)

**Liner Bags** 

Custom Bigbelly Liner Bags (#BBS-CB4647 or #BBS-RCB4647) are available for purchase. Contact WasteZero at 800.866.3954 or www.WasteZero.com/Bigbelly.

The black or clear bags are 47"H x 46"W (120cm x 117cm) and 2.5mil (64µ) thick.

Custom Smartbelly Liner Bags (#BBS-RB4255) are available for purchase. Contact WasteZero at 800.866.3954 or www.WasteZero.com/Bigbelly.

The clear bags are 55"H x 42.5"W (140cm x 108cm) and 1.25mil (32µ) thick.

Custom Smartbelly Liner Bags (#BBS-RB4255) are available for purchase. Contact WasteZero at 800.866.3954 or www.WasteZero.com/Bigbelly.

The clear bags are 55"H x 42.5"W (140cm x 108cm) and 1.25mil (32 $\mu$ ) thick.

### **Bigbelly Hoppers**



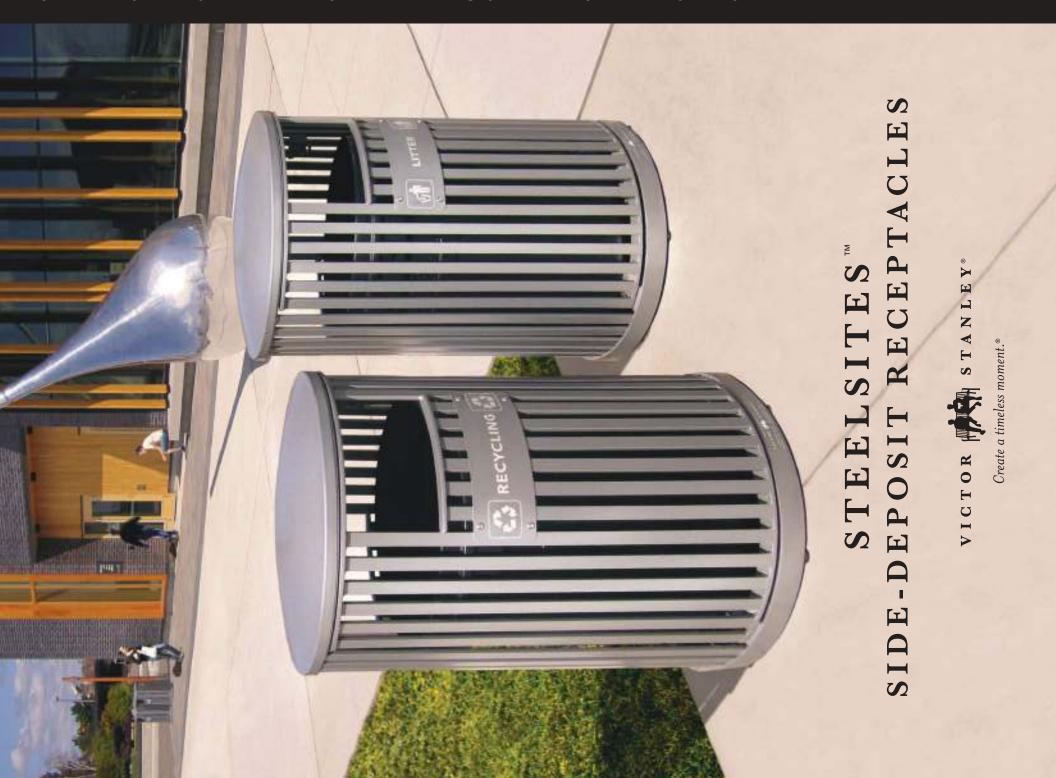
### **Smartbelly Flaps**



### **Smartbelly Faceplates**



PLEASE NOTE: Green hoppers, faceplates or flaps require additional 6 weeks to process.



These side-deposit receptacles feature side-door hinges that incorporate stainless-steel pins and oil-impregnated bronze bushings, eliminating friction and maximizing the lifespan of the product. The contemporary SDC and RSDC steel receptacle embraces an uncluttered, clean-lined design, exceptionally high recycled content, and features two unique side-deposits. It's just one more way Victor Stanley helps you create the perfect setting for timeless moments.

### SDC SIDE-DEPOSIT RECEPTACLE

Model SDC-36: 36 gal (136 L) capacity. Model SDC-24: 24 gal (90 L) capacity. Standard solid convex lid. Heavy steel latch.

### OPTIONS

Keyed lock (US Patent 6,339,944 Bl). Ashtray (standard or covered). Half-Moon liners. Galvanized steel liner (powder coat available). Side-access plate with recycle holes for SDC-36. Raised band and decals. Custom decals and plaques.





Raised band and decals.

### RSDC SIDE-DEPOSIT RECEPTACLE

Model RSDC-36: 36 gal (136 L) capacity.

Standard solid convex lid with divider. Customized steel panels to isolate different waste streams entering the receptacle, such as separating cans or plastic bottles from paper. Heavy steel latch. Half-Moon liners. Standard decal package. US Patents D671,289 S; D661,857 S.

### OPTIONS

Keyed lock (US Patent 6,339,944 B1). Ashtray (standard or covered). Raised band and decals. Custom decals and plaques.

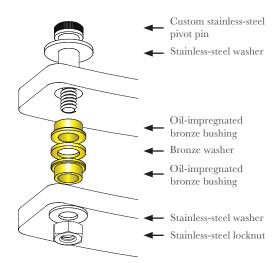




See product specifications for further details. Drawings are not to scale. Our TGIC powder-coating averages 8-10 mils (200-250 microns) thick and is applied in-house to ensure the highest level of quality. Offered in 12 standard and metallic colors, plus a full range of RAL colors with available color matching. Additional cost may apply.

### SIDE-DOOR HINGES

Composed of embedded precision stainless-steel pivot pins and oil-impregnated bronze bushings for reliable allweather durability year after year.



### ASHTRAYS

Our large, heavy duty, stainless steel ashtrays are 2 in (51 mm) deep and are available in standard or covered.



Standard ashtray.



Covered ashtrays.

### KEYED LOCK

Our keyed lock (US Patent 6,339,944 Bl) is a unique design with a custom key to prevent tampering and residential trash.



Keyed lock.

### HIGH-DENSITY PLASTIC LINERS

Our standard full and Half-Moon plastic receptacle liners (pair) are formed on custom molds designed for us. Reinforced, ribbed and molded for durability and ease of use. The primary raw material is recycled resin. Half-Moon liners make it easier and more cost effective than ever to separate different waste streams without sacrificing capacity or durability.



Standard liner.



Half-Moon liners.



Victor Stanley, a leader in quality site furnishings, helps you bring your visions to life. From benches and litter receptacles to bike racks and planters, we meticulously design, engineer, and manufacture every detail to ensure our site furnishings will withstand the test of time. Founded over 50 years ago, we help create a place for people to gather, live life, and make timeless moments.



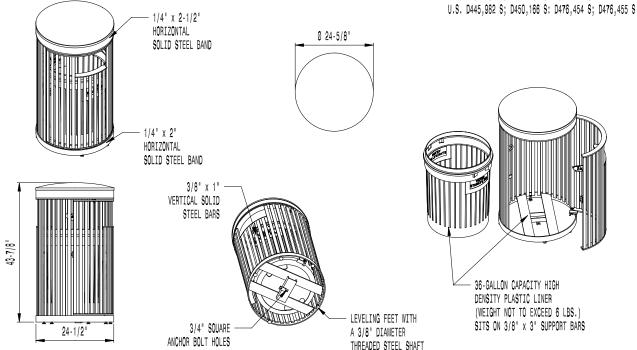
Create a timeless moment.®



\* ALL DIMENSIONS ARE IN INCHES \*

P.O. DRAWER 330 - DUNKIRK, MD 20754 USA TOLL FREE: (800) 368-2573 (USA & CANADA) TEL (301) 855-8300 - FAX (410) 257-7579 WEB SITE: HTTP://WWW.VICTORSTANLEY.COM

DERIVED FROM NSDC-36 RECEPTACLE, NSDC-36 COVERED
BY ONE OR MORE OF THE FOLLOWING PATENTS
U.S. DAME 082 S. DASC 188 S. DAZS ASA S. DAZS ASA



AVAILABLE OPTIONS: POWDER COATING

10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS, CUSTOM COLORS (INCLUDING THE RAL RANGE)

CUSTOM PLAQUES & DECALS

AVAILABLE WITH STEEL PLAQUES IN VARIOUS SIZES AND PRESSURE SENSITIVE VINYL OUTDOOR DECALS.

LID

STANDARD WITH SOLID CONVEX LID, AVAILABLE WITH OPTIONAL SOLID CONVEX LID WITH RAISED BAND (AS SHOWN). AVAILABLE WITH OPTIONAL STAINLESS STEEL ASHTRAY. ASHTRAYS AVAILABLE WITH OPTIONAL ASHTRAY COVER.

SECURITY

SHOWN WITH STANDARD INTERIOR LATCH. AVAILABLE WITH OPTIONAL KEYED LOCK BOX OR TRI-KEYED LOCK BOX. LID BOLTED IN PLACE. AVAILABLE WITH OPTIONAL SIDE-ACCESS PLATE WITH RECYCLE HOLES, OPTIONAL MOUNT WITH 3 IN-LINE ANCHOR HOLES AND OPTIONAL BOTTOM PLATE COVER.

### NOTES:

- 1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
- ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER
  COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD FILM COATING. COATED PARTS ARE THEN FULLY CURED
  TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
- OIL IMPREGNATED BRONZE BUSHINGS AND STAINLESS STEEL PIVOT PINS FOR DOOR MOVEMENT, STANDARD 3/16" SOLID STEEL LATCH ASSEMBLY OR OPTIONAL
  PATENTED STAINLESS STEEL KEYED LOCK ASSEMBLY.
- 4. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
- VICTOR STANLEY, INC., PLASTIC INNER LINERS ARE MOLDED ON TOOLING DESIGNED FOR AND OWNED BY VICTOR STANLEY, INC. THEY OFFER MAXIMUM CAPACITY AND STRENGTH WITH LIGHTWEIGHT CONSTRUCTION USING CRITICAL MOLDED RIBS, INTEGRAL HANDHOLDS, AND HIGH-STRENGTH MATERIALS. THIS MINIMIZES HANDLING DIFFICULTY AND FACILITATES EASY EMPTYING AND STORAGE WHILE AFFORDING LONG SERVICE LIFE.
- 6. ANCHOR BOLT NOT PROVIDED BY VICTOR STANLEY, INC.
- 7. FOR HIGH SALT ABUSIVE CLIMATES, HOT-DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-DIP GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN EXPERIENCED QUALIFIED FIRM TO WHICH PRODUCTS ARE SHIPPED FOR GALVANIZING. HOT-DIP GALVANIZING INCLUDES AN AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK OF CHARGED LIQUID ZINC AT OR AROUND 860°F (460°C). THE RESULTING SURFACE IS RESISTANT TO RUST BUT HAS SOME UNEVENNESS RESULTING FROM THE BONDING OF THE ZINC TO THE STEEL SURFACE. AS A RESULT, THE POWDER-COATING SURFACE FINISH OVER THAT GALVANIZED SURFACE MAY EXHIBIT BUMPS, UNEVENNESS, AND MAY NOT BE AS SMOOTH AS THE STANDARD FINISH; THIS UNEVEN AND INCONSISTENT FINISH IS NORMAL FOR GALVANIZING. CONTACT MANUFACTURER FOR DETAILS.
- 8. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
- 9. THIS PRODUCT IS SHIPPED FULLY ASSEMBLED.



36 GALLON SIDE-DOOR-OPENING LITTER RECEPTACLE WITH SIDE ACCESS SHOWN: OPTIONAL SOLID CONVEX LID WITH RAISED BAND





Date: Invoice #: Customer ID: Expires:

To: Name:

Ship to: Zip Code 05401

City: Address

Salesp	person	Shipping Method	Shipping Terms	Delivery Date	Payment Terms	
Evan N	1adden	Truck	FOB Burlington	90 Days ARO	see attached	
Item #	QTY	Descri	ption	Unit Price	Line Total	
1	1	Portland Loo- Single toilet. Basic unit carl 304 SS panels, louve heat trace, interior of lighting with photoe sensor control and of AC power option. (Land LH/RH hand wo determinded later) drawings.	bon steel posts and ers, door & roof. 40W and exterior LED eye and motion occupancy counter. LH/RH door swing ash basin to be	\$90,000.00	\$90,000.00	
2	1	Portland Loo- Single toilet. Basic unit carl 304 SS panels, louve heat trace, interior of lighting with photoe sensor control and of Solar powered only solar, 2 batteries, and (LH/RH door swing of wash basin to be de See attached drawn).	bon steel posts and ers, door & roof. 40W and exterior LED eye and motion occupancy counter. option with 3 panel and solar controller. and LH/RH hand eterminded later)	\$92,000.00	\$92,000.00	
3	1	Portland Loo- Single toilet. Basic unit carl 304 SS panels, louve heat trace, interior of lighting with photoes sensor control and of Hybrid power option solar controller and (LH/RH door swing of handwash basin to later). See attached	bon steel posts and ers, door & roof. 40W and exterior LED eye and motion occupancy counter. In with 3 panel solar, 2 battery back up. and LH/RH be determinded	\$92,600.00	\$92,600.00	
4	1	Loo Template		incl	-	
5	1	Foundation Mountir	ng Hardware	incl	-	
6	1	Shipping & Handling	g One Restroom	\$6,600.00	\$6,600.00	
7	1	Cold Weather Toilet	Upgrade	\$4,500.00	\$4,500.00	
8	1	Baby Changing Tab	ble	\$1,470.00	\$1,470.00	
9	1	Sharps Container		\$500.00	\$500.00	
10	1	Trash Can		\$100.00	\$100.00	
11	1	Hand Wash Basin		\$1,500.00	\$1,500.00	

Subtotal lotal

See Above

### THE PORTLAND LOO

### STRUCTURAL/ARCHITECTURAL DRAWINGS

### **GENERAL NOTES**

- 1. WEIGHT: 6,013 lbs
- 2. SQUARE FOOTAGE: 51.5
- 3. ALL STRUCTURAL STEEL TO BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC MANUAL 9th EDITION & A.W.S. ALL PANELS, LOUVERS, AND ROOF TO BE 304 STAINLESS STEEL,
- 4. STRUCTURAL TUBING ASTM 500 GR. B
- 5. ANCHOR BOLTS 1/2" X 5" TITENS
- 6. ALL WELDING TO BE DONE BY CERTIFIED WELDERS.
- 7. ALL EXPOSED BOLTS AND SCREWS TO BE TAMPER RESISTANT FOR HEX PIN BITS.
- 8. RIVET NUTS TO BE C.F.T. SERIES AND STAINLESS STEEL 302.
- 9. ALL MATERIALS TO BE SAND BLASTED AND POWDER COATED
- 10. ALL STRUCTURES TO BE FABRICATED OFF SITE SHALL BE DONE IN SHOPS OR FABRICATORS LICENSED OR APPROVED BY THE BUILDING AND ENGINEERING DIVISION OF THE CITY FOR WHICH IT IS INTENDED FOR

### **DESIGN INFORMATION**

- 1. DESIGN IS BASED ON INTERNATIONAL BUILDING COLD IRC 2012 EDITION AND ASCE7-10
- 2. SNOW LOAD=25 PSF MAX
- 3. WIND DESIGN CRITERIA: 140 MPH (3-SECOND GUST) EXPOSURE C
- 4. SEISMIC DESIGN CRITERIA: SDS=1.0 MAXIMUM, R-6.5 (LIGHT FRAME SHEAR WALL), IMPORTANCE FACTOR=1
- 5. SEISMIC DESIGN CATEGORY: D
- 6. SITE CLASS D
- 7. CONTRACTOR TO VERIFY DESIGN PARAMETERS SHOWN WITH ACTUAL SITE CONDITIONS AND INSURE ACTUAL SITE PARAMETERS NOT EXCEED DESIGN

### A2.0 **EXTERIOR ELEVATIONS FRONT & RIGHT SIDE** A3.0 **EXTERIOR ELEVATIONS BACK & LEFT SIDE ROOF LAYOUT** A4.0 **INTERIOR SECTION VIEWS** A5.0 **INTERIOR SECTION VIEW** A6.0 **COLUMN AND BEAM LAYOUT S1.0 S2.0** FRONT DOOR **FOUNDATION & ANCHOR BOLT LOCATIONS S3.0 S4.0** STANDARD OPTIONS P1.0 PLUMBING FLOOR PLAN P2.0 PLUMBING DETAIL **ELECTRICAL SCHEMATIC**

SHEET INDEX

**COVER SHEET** 

FLOOR PLAN

A0.0

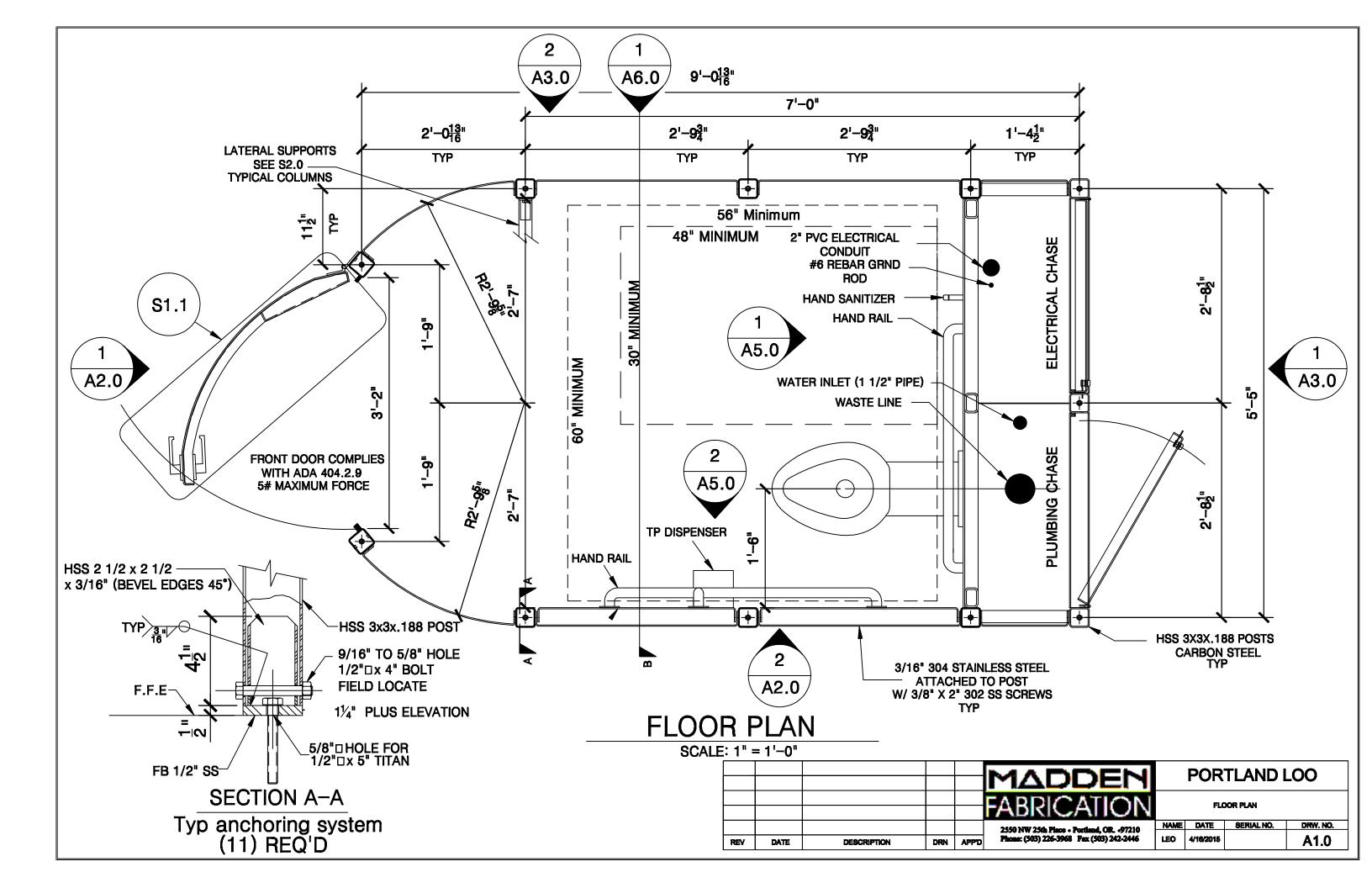
A1.0

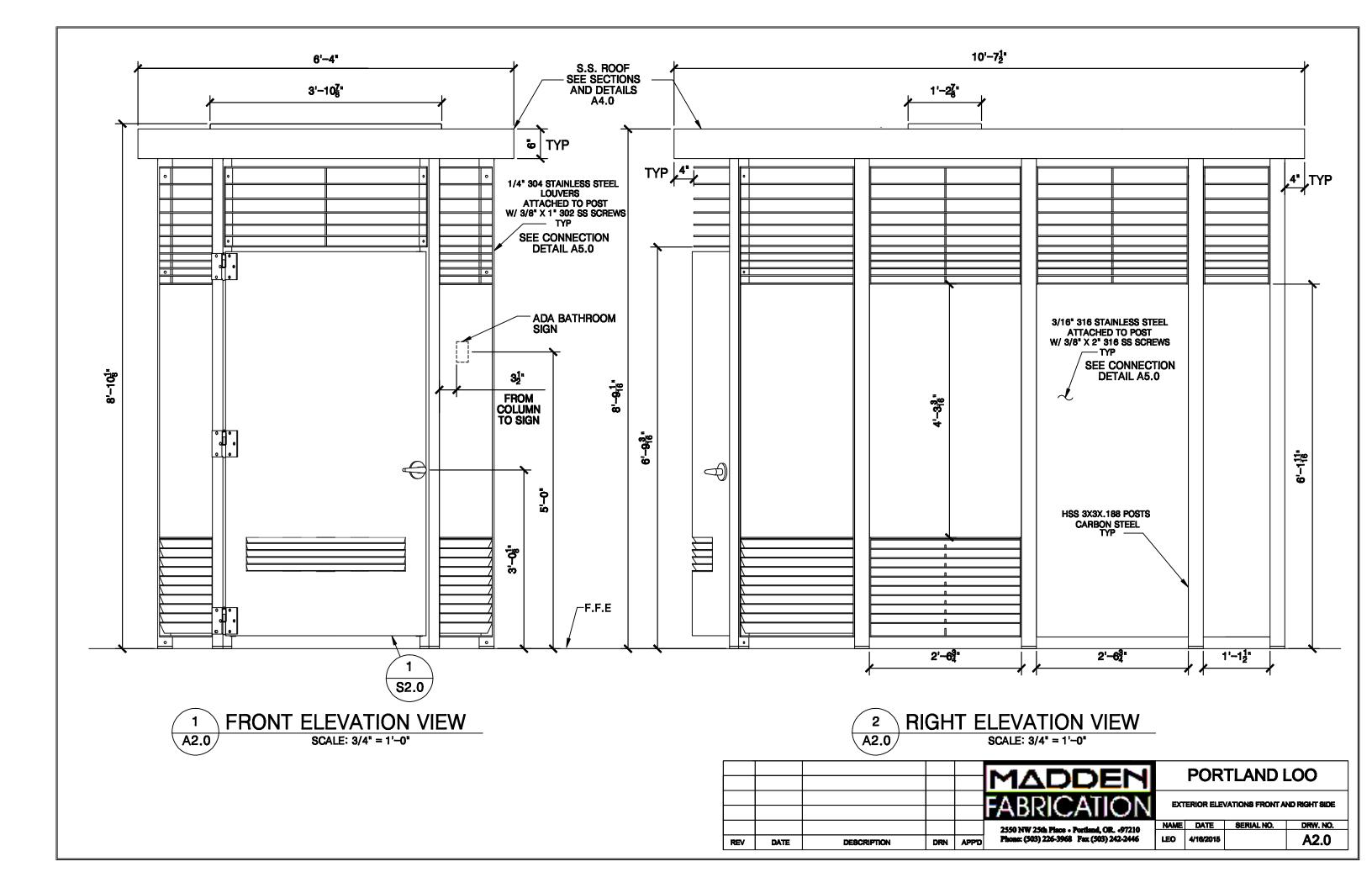
### SPECIAL INSPECTIONS

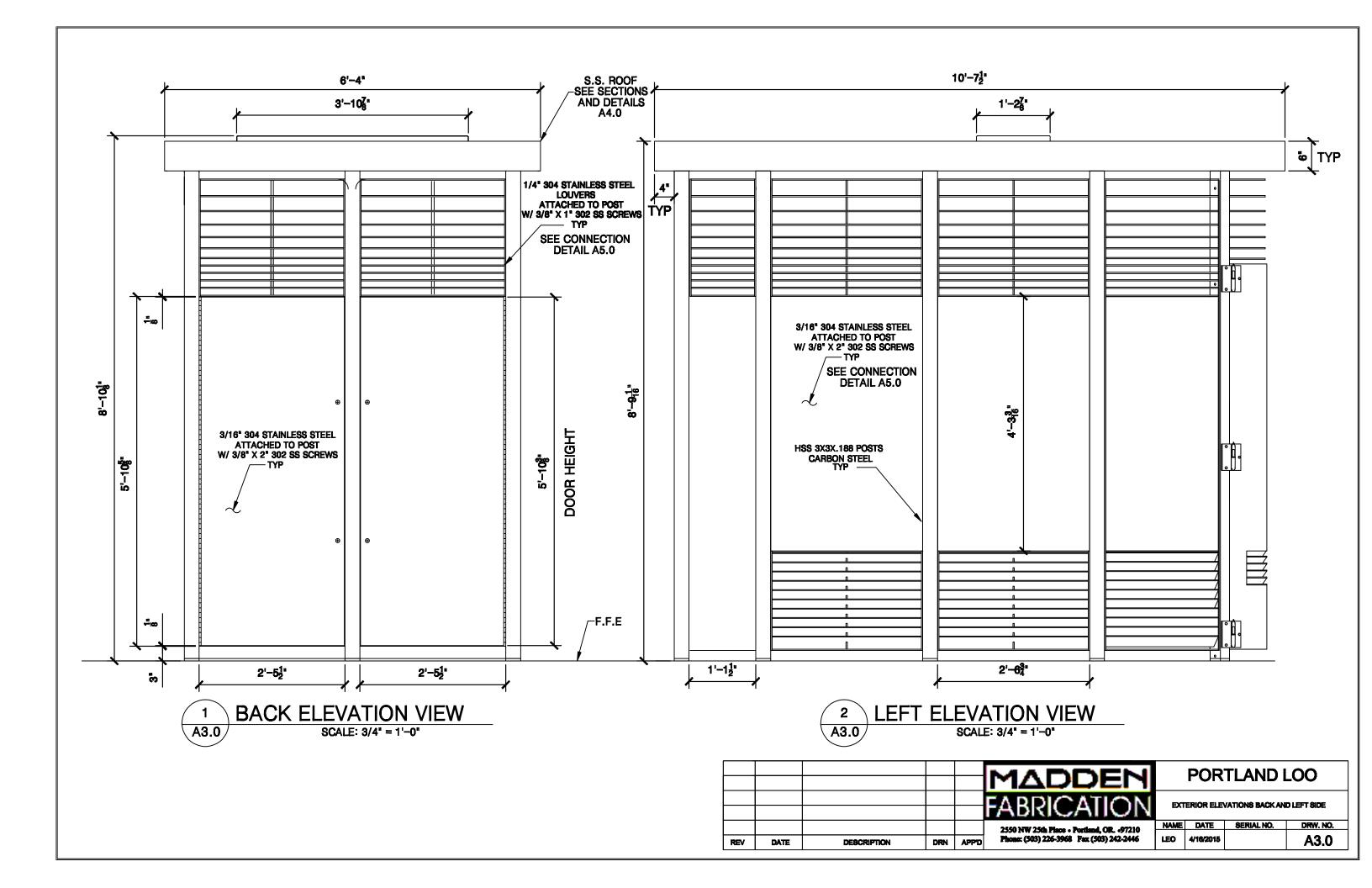
- 1. AN INDEPENDENT TESTING COMPANY OR SPECIAL INSPECTOR RETAINED BY THE OWNER AND APPROVED BY THE BUILDING OFFICIAL SHALL INSPECT THE FOLLOWING.
  - A. FOUNDATION REINFORCING STEEL PLACEMENT
  - B. VERIFY USE OF REQUIRED CONCRETE MIX DESIGN
  - C. CONCRETE PLACEMENT
  - D. ANCHOR BOLTS-TITENS

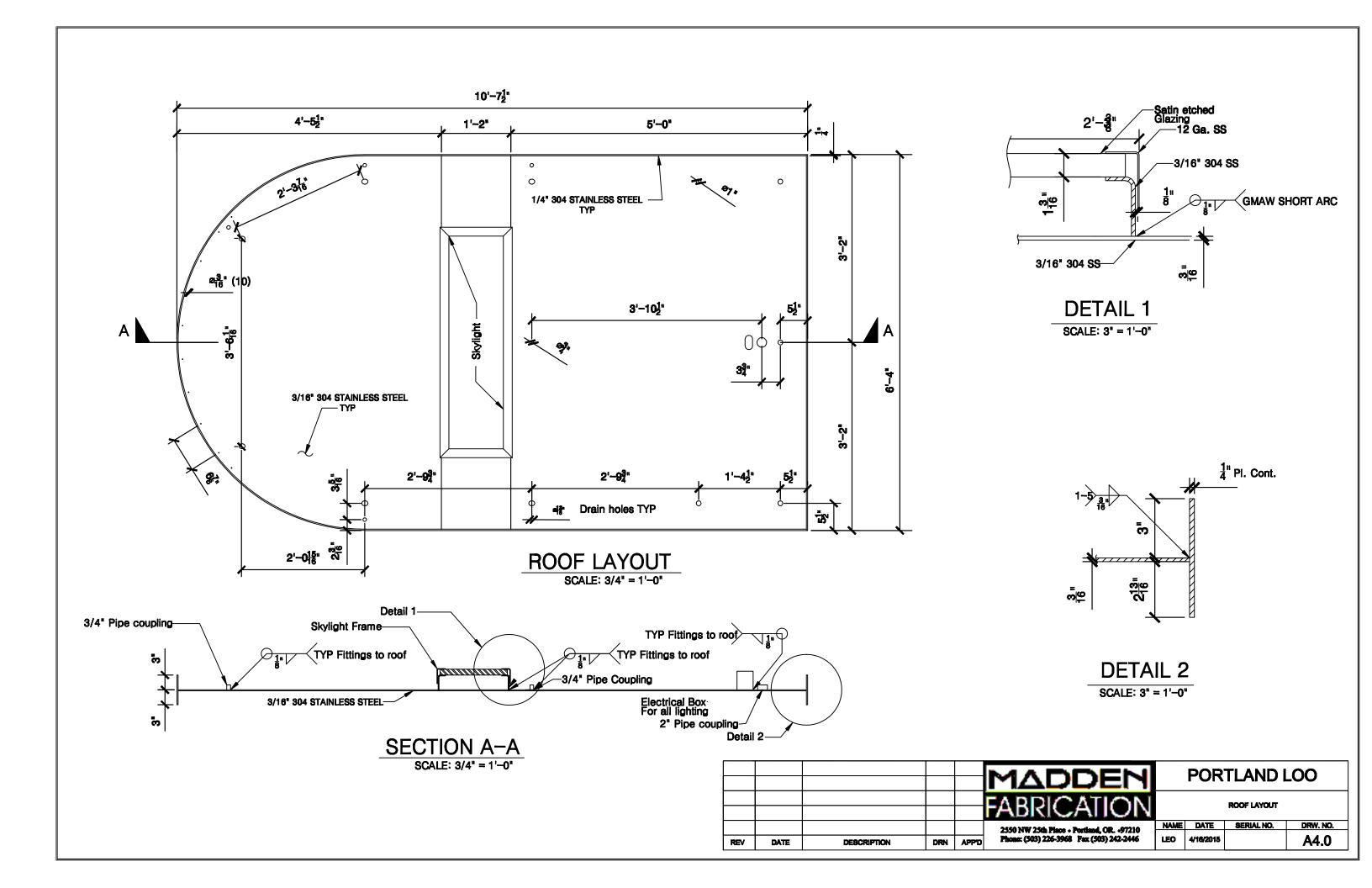
(INSTALLED AFTER CONCRETE HAS HARDENED)

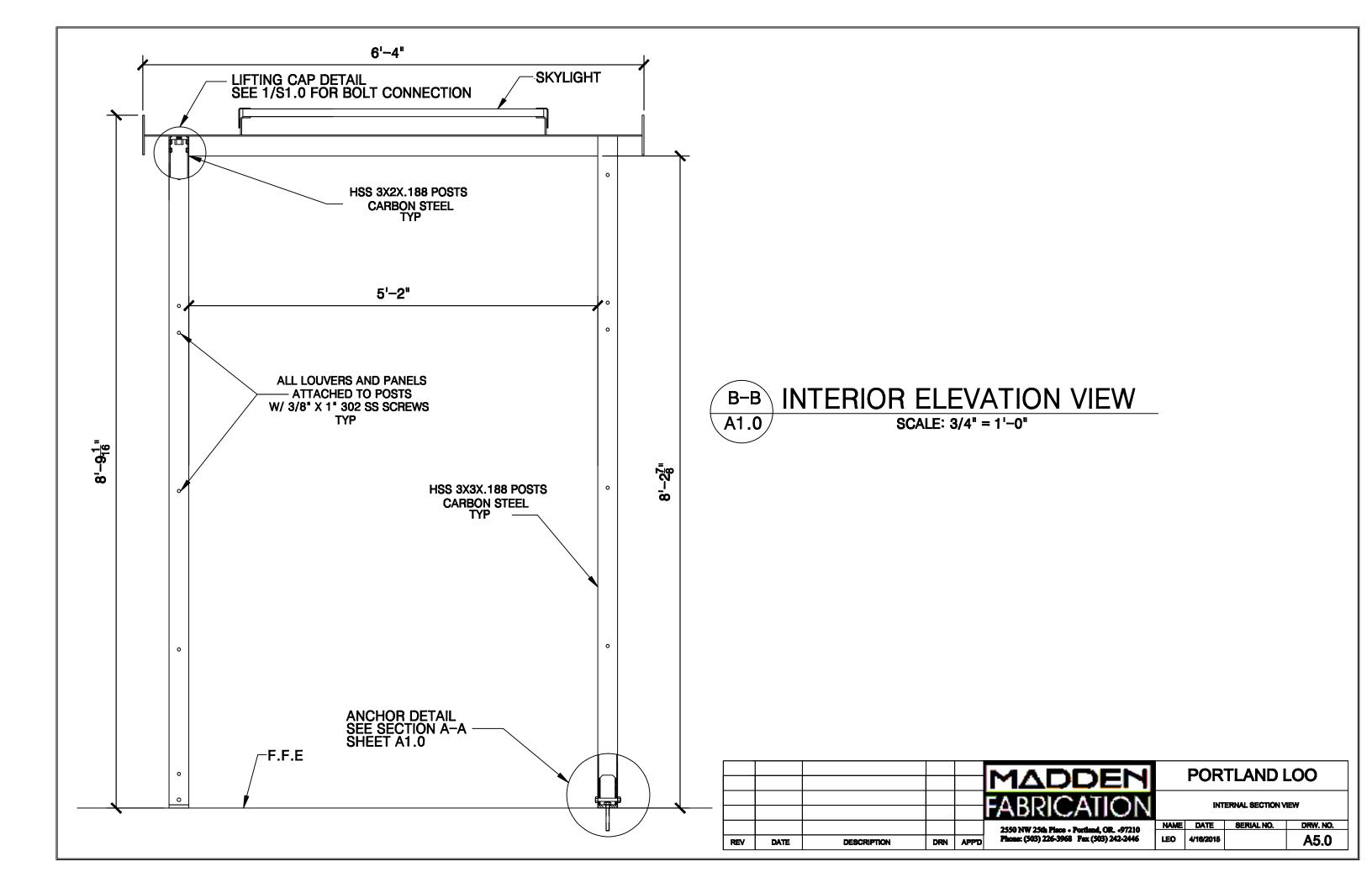
					MADDEN		POR	TLAND I	LOO
					<b>FABRICATION</b>			COVER SHEET	
					2550 NW 25th Place • Portland, OR. •97210	NAME	DATE	SERIAL NO.	DRW. NO.
REV	DATE	DESCRIPTION	DRN	APP'D	The same (#00) 000 0000 Tour (#00) 040 0446	LEO	4/16/2015		A0.0

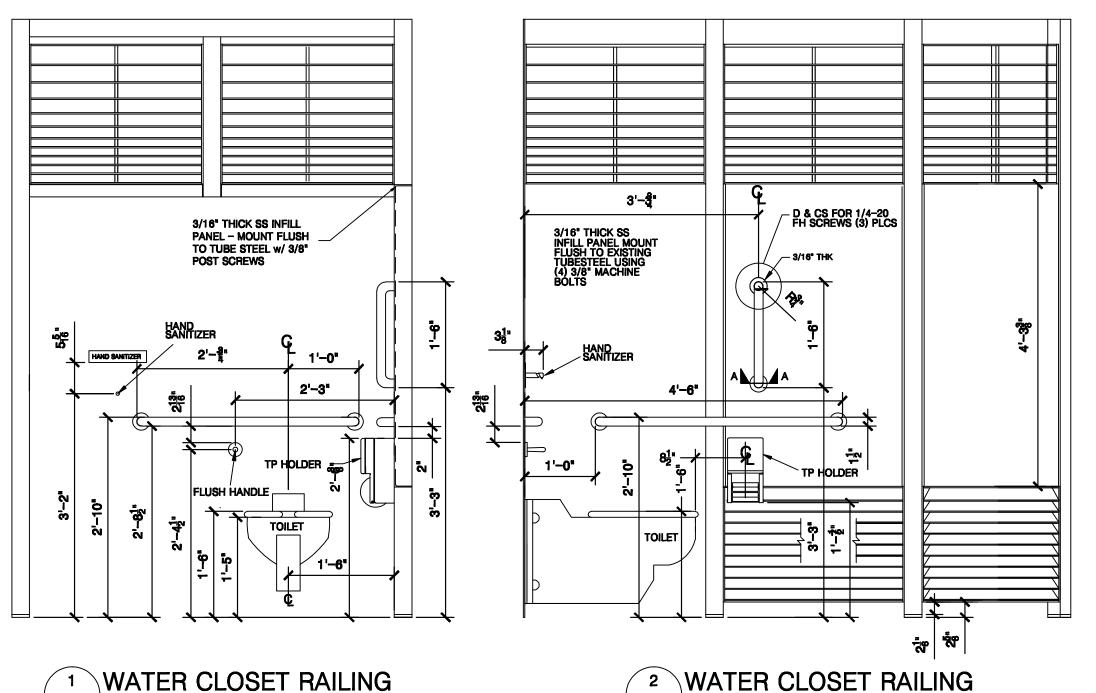












ALL GRAB BARS COMPLY WITH ADA 609.8 TO WITHSTAND FORCE OF 250# ±2 1/4-20 FH SCREWS (3) PLCS TYP RAIL TO PANEL CONNECTION

> SECTION A-A Typ anchoring system (11) REQ'D

SCALE: 3" = 1'-0"

WATER CLOSET RAILING

1 1/2"□k.120" wall ss Plate 3/16" ss A5.0 (1) Assm REQ'D

SCALE: 3/4" = 1'-0"

SCALE: 3/4" = 1'-0" A5.0

DATE

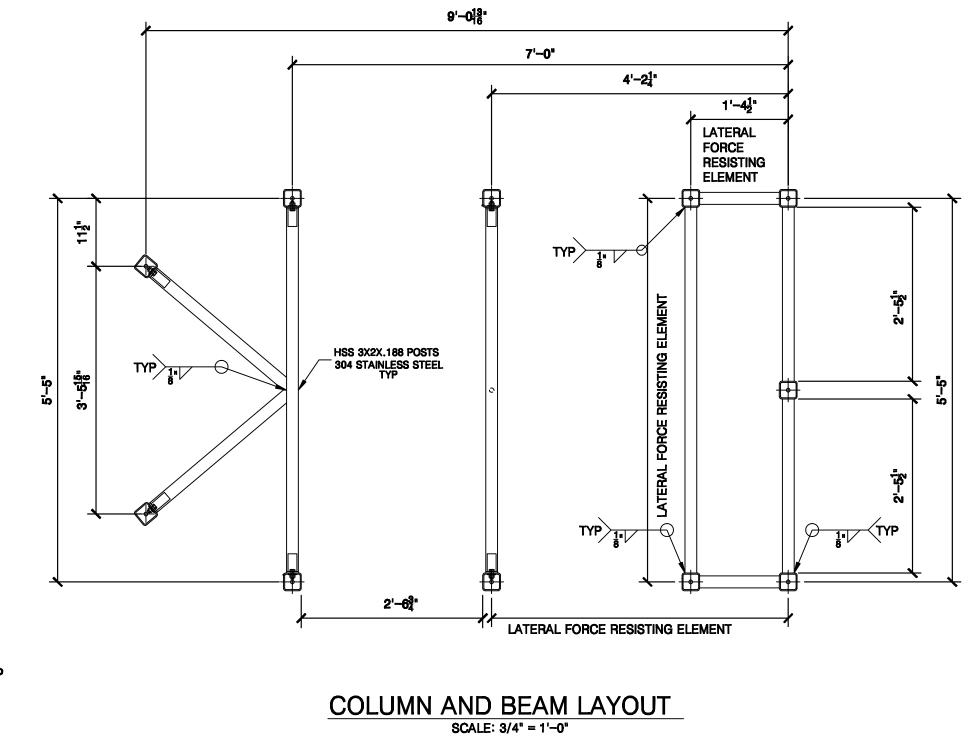
DESCRIPTION

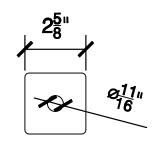
1 1/2" Dx.120" wall ss Plate 3/16" ss (1) Assm REQ'D

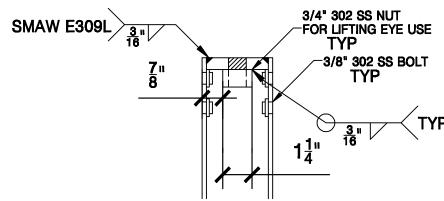
REV

**PORTLAND LOO** INTERNAL SECTION VIEWS NAME DATE DRW. NO. 2550 NW 25th Place • Portland, OR. •97210 Phone: (503) 226-3968 Fax (503) 242-2446 LEO 4/16/2015 A6.0

DRN APP'D

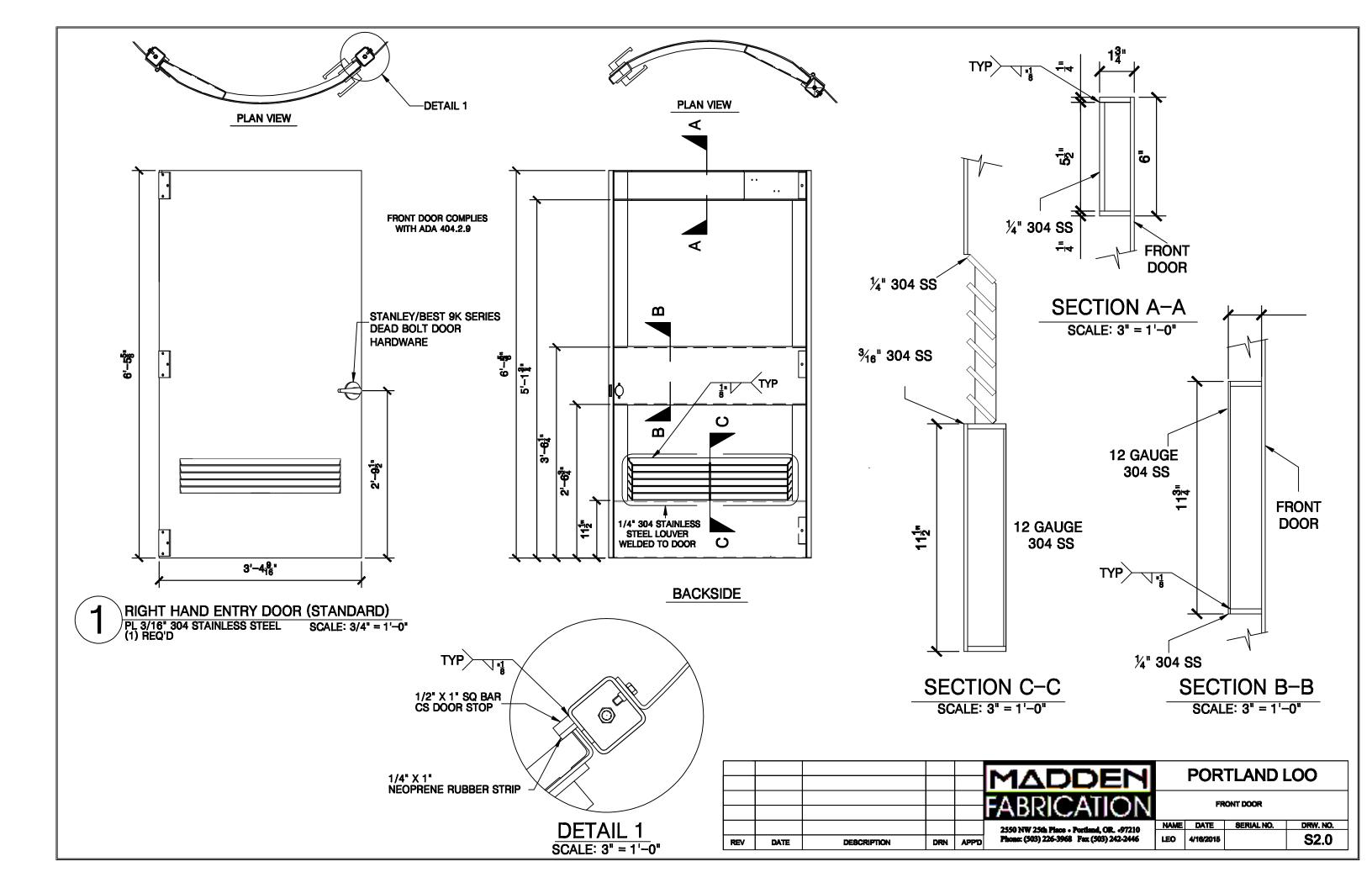


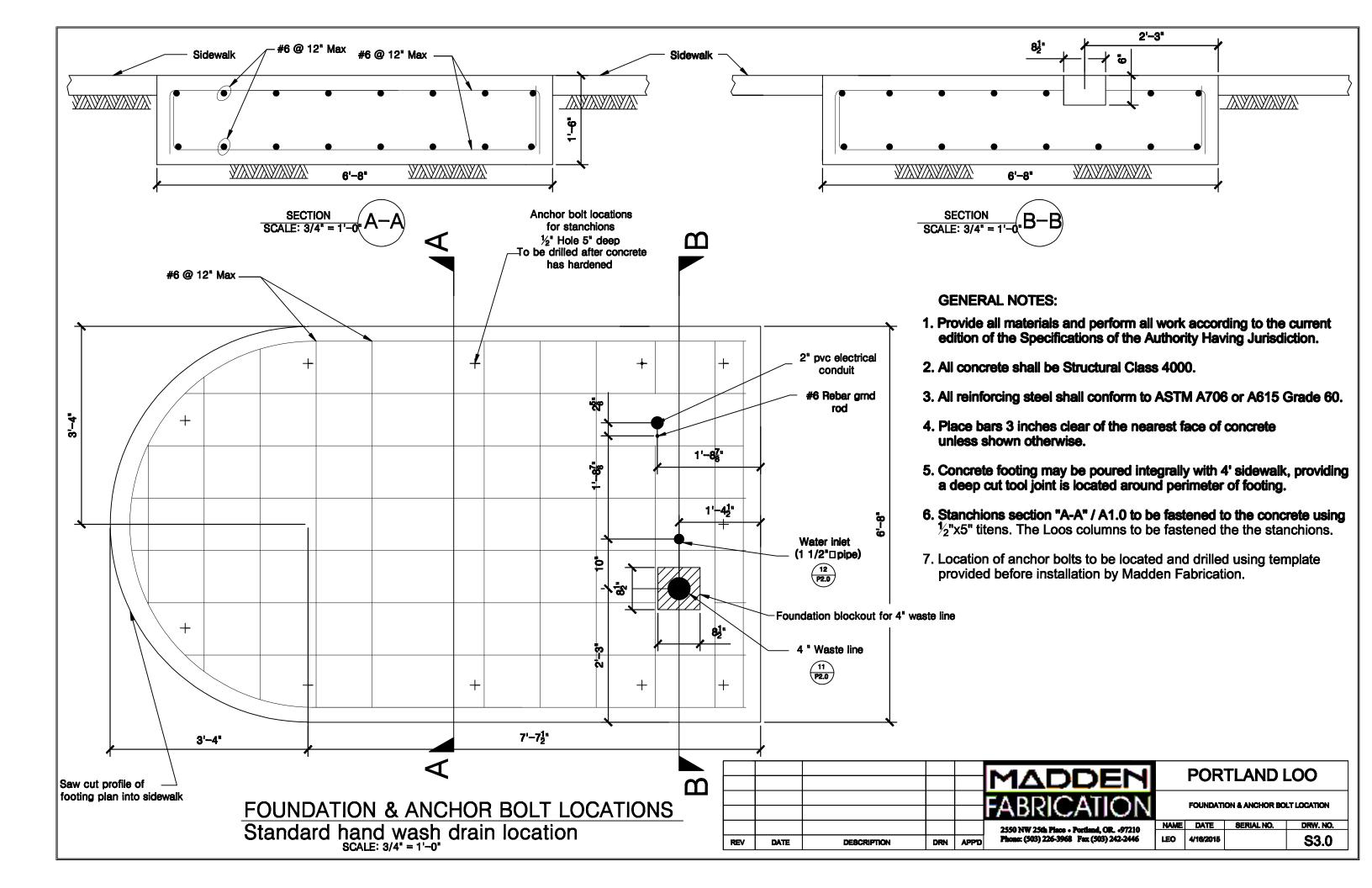


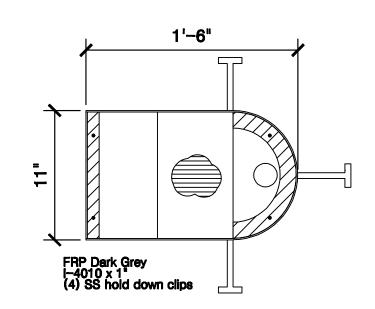


1 COLUMN LIFTING CAP
S1.0 1/2" 304 SS
TAP FOR 3/4-10 Bolt
(11) REQ'D
SCALE: 3" = 1'-0"

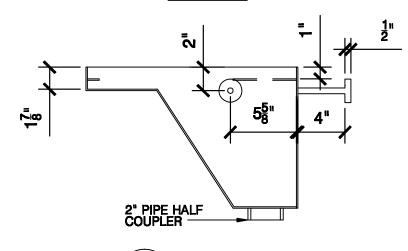
					MADDEN		POR	TLAND I	-00
					<b>FABRICATION</b>		COLU	MN AND BEAM LAY	<i>r</i> out
					2550 NW 25th Place • Portland, OR. •97210	NAME	DATE	SERIAL NO.	DRW. NO.
REV	DATE	DESCRIPTION	DRN	APP'D	Bh (800) 226 2060 B (800) 242 2446	LEO	4/16/2015		S1.0





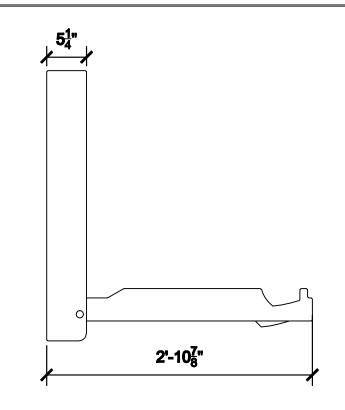


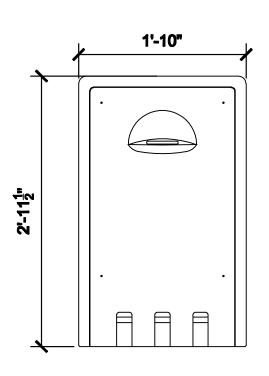




WASH BASIN

Sheet 12 GA SS (1) Assembly REQ'D

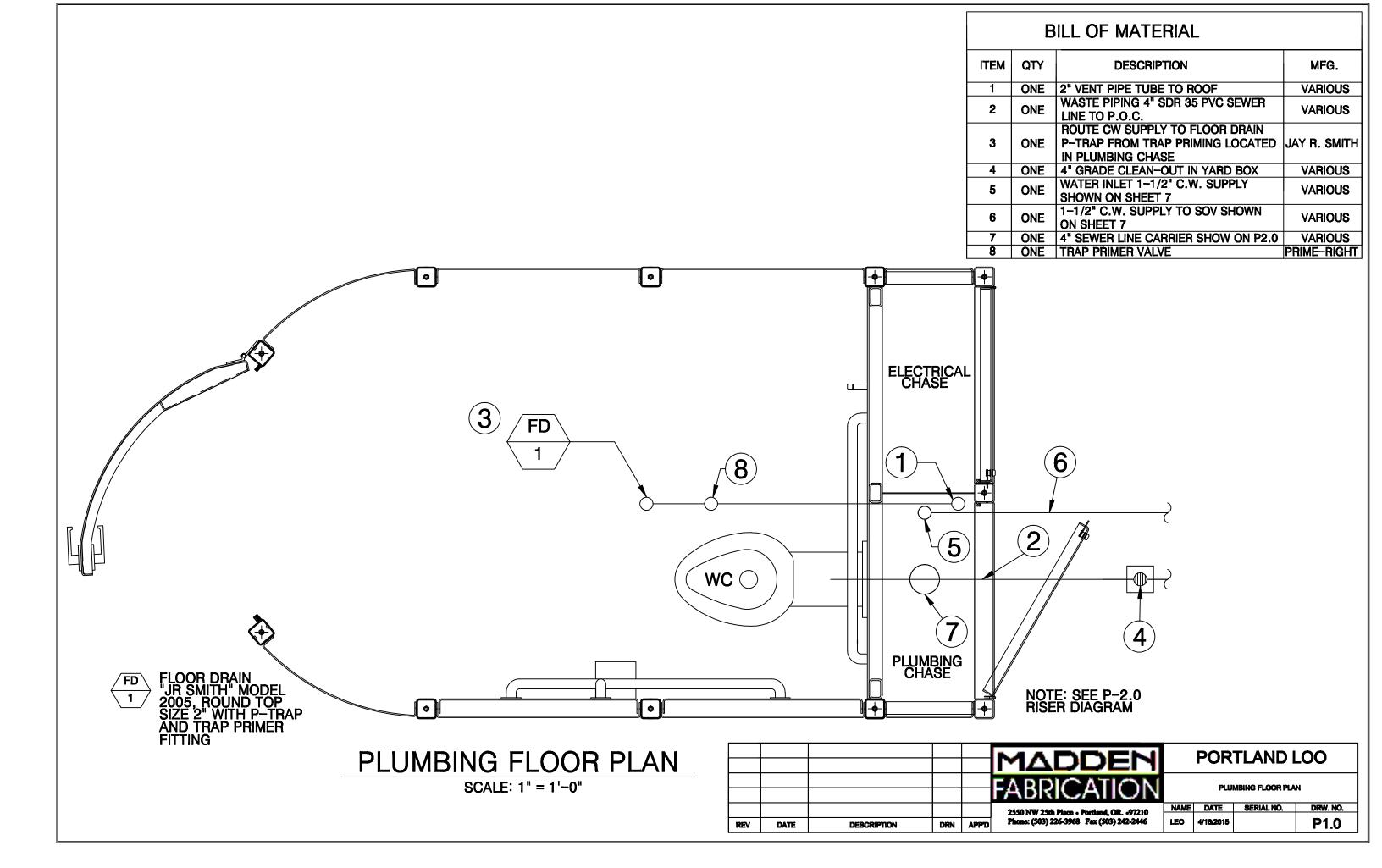


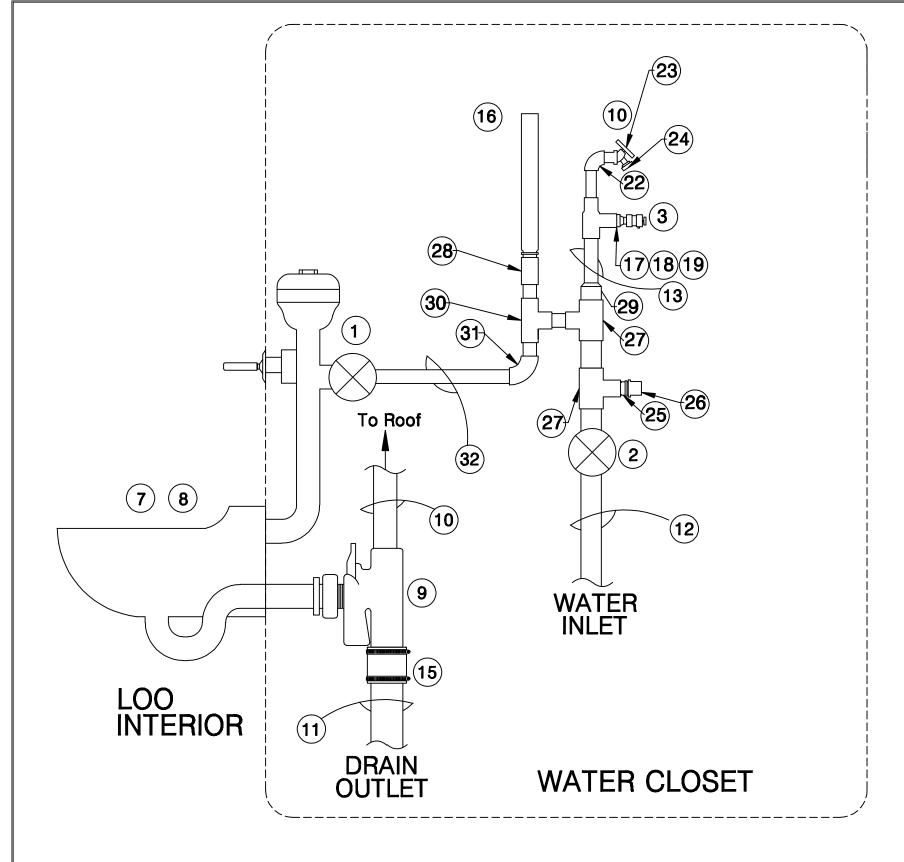




NOTE: TO BE MOUNTED ON INTERIOR INFILL PANEL

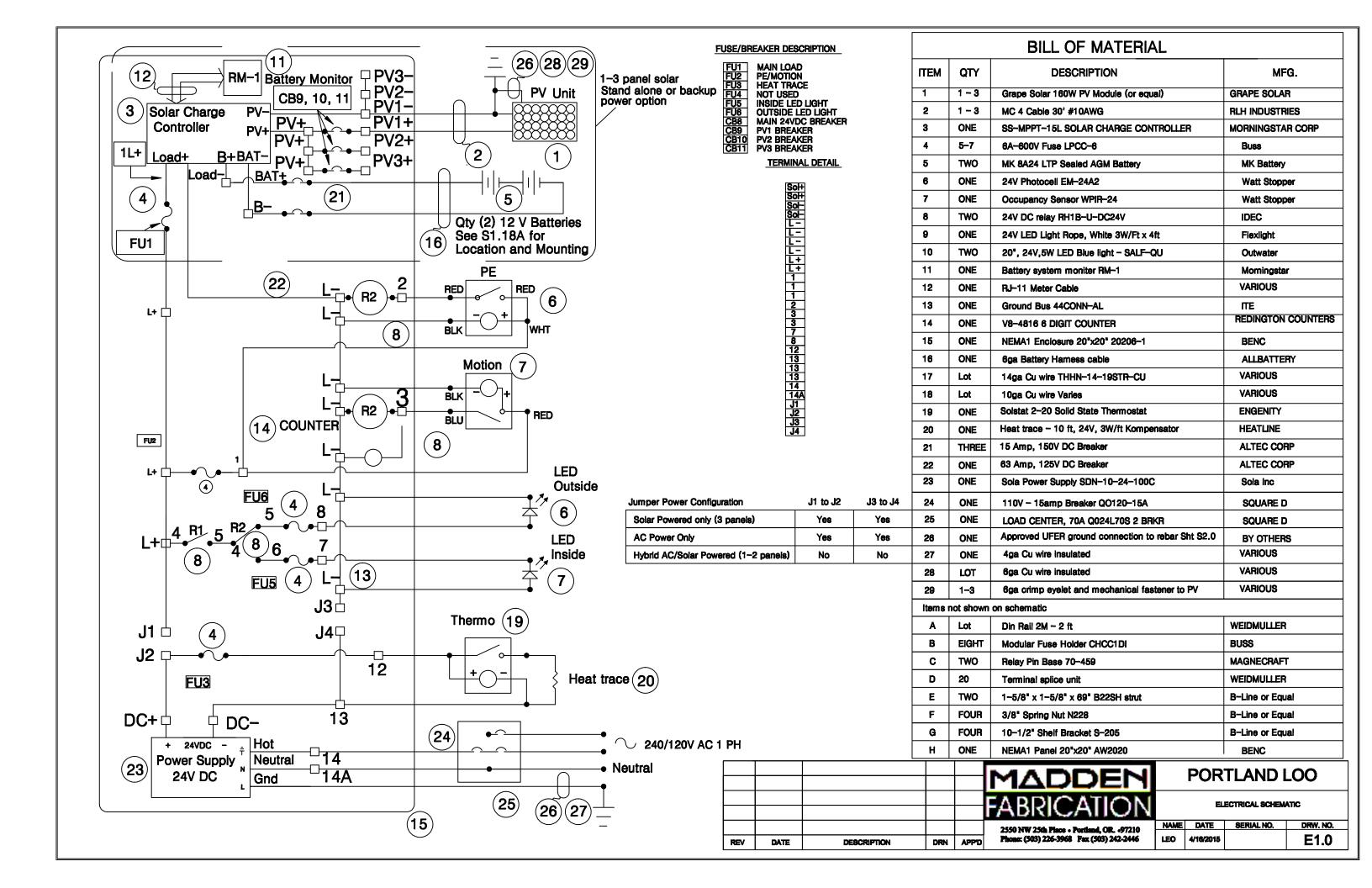
					MADDEN		POR	TLAND I	LOO
					<b>FABRICATION</b>		8	TANDARD OPTION	<b>IS</b>
					2550 NW 25th Place • Portland, OR. •97210	NAME	DATE	SERIAL NO.	DRW. NO.
REV	DATE	DESCRIPTION	DRN	APP'D	The way (100) 206 2069 Tom (100) 242 2446		4/16/2015		S4.0





	В	ILL OF MATERIAL	
ITEM	QTY	DESCRIPTION	MFG.
1	ONE	140-1.28 w/ MBFW FLOW UNIT	SLOAN
2	ONE	1 1/2" MAIN SHUT OFF VALVE	VARIOUS
3	ONE	1" - 1/4 TURN SHUT OFF VALVE	VARIOUS
7	ONE	2105-W-1-CN DURA-WARE TOILET	ACORN
8	ONE	DURABLE PLASTIC TOILET SEAT	ACORN
9	ONE	440 Y CARRIER	JAY R. SMITH
10	ONE	2-1/2" SS Sch 40 PIPE	VARIOUS
11	ONE	4" SEWER DRAIN	OTHERS
12	ONE	1-1/2" CU SUPPLY	OTHERS
13	ONE	3/4" IPS CU PIPE	VARIOUS
4 =	0115	di pupper court no	FERMO
15	ONE	4" RUBBER COUPLING	FERNCO
16	ONE	EXPANSION HAMMER DEVICE	VARIOUS
17	ONE	1" TO 3/4" DOUBLE REDUCING TEE	VARIOUS
18	ONE	3/4" TO 1/2" THREADED REDUCER	VARIOUS
19	ONE	3/4" TO 1/2" REDUCER	VARIOUS
	ONE	1/8" PLASTIC AIR LINE	ACORN
22	ONE	0/4" 00 DEODEE EL DOW/ DIDE	VADIOLIC
23	ONE	3/4" 90 DEGREE ELBOW PIPE	VARIOUS
23	ONE	HOSE BIB	VARIOUS VARIOUS
25	ONE	ANTI SIPHON SOLDERED THREADED FITTING	VARIOUS
26	ONE ONE	1" THREADED CAP	VARIOUS
27	TWO	1 1/2" TO 1" REDUCING TEE	VARIOUS
28	ONE	1" TO 1" FEMALE THREADED COUPLER	VARIOUS
29	ONE	1 1/2" TO 1" REDUCER	VARIOUS
30	ONE	1" TEE	VARIOUS
31	ONE	1" 90 DEGREE ELBOW PIPE	VARIOUS
32	ONE	1" CU PIPE	VARIOUS
33	ONE	1 1/2" TO 1" REDUCING TEE	VARIOUS
34	ONE	1 1/2" TO 1" REDUCING TEE	VARIOUS
35	ONE	1 1/2" TO 1" REDUCING TEE	VARIOUS
	ONE	TRAP PRIMER VALVE	PRIME-RITE

				<u>'                                      </u>				<b>I</b>	
					MADDEN		POR	TLAND	LOO
					<b>FABRICATION</b>			PLUMBING DETA	IL.
					2550 NW 25th Place • Portland, OR. •97210	NAME	DATE	SERIAL NO.	DRW. NO.
REV	DATE	DESCRIPTION	DRN	APP'D	Th (200) 206 2069 T (200) 242 2446	LEO	4/16/2015		P2.0



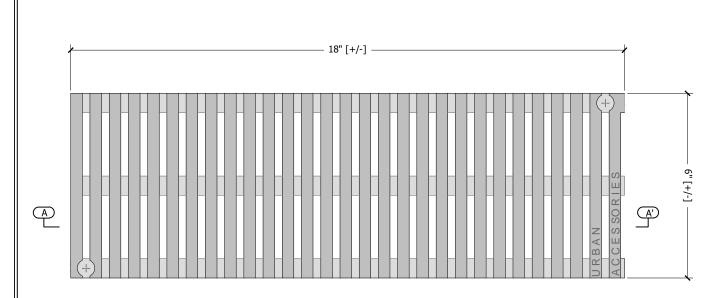
- **1. Terms of Payment.** 30% at time of order, 50% at time of shipment and remaining 20% Net 30 after receipt by customer.
  - a. Deviation from Payment. Payment Time is of the essence with respect to Buyer's payment of the purchase price, and timely payment shall not be delayed or excused for any reason. Payment agreement between Buyers and other parties, or failure by other parties to pay Buyer or perform any agreement with Buyer shall not result in delay of payment to Madden Fabrication. Madden Fabrication does not accept partial payments, any offsets, credit card merchant fees and/or retainage against the Purchase Order price. Should Buyer not act according to the terms of payment for any reason, the terms will be revoked and any remaining goods or services not yet delivered are subject to pre-payment terms whereby payment, in full is due 10 days prior to delivery. Any amounts not paid when due shall bear interest at the rate of 18 percent per annum or the highest lawful rate applicable, if such rate is less than 18 percent, from the date payment was due. The Madden Fabrication Warranty becomes null and void when payment is more than 5 business days past due.
  - **b. Tax.** Unless otherwise indicated on the Madden Fabrication quote or purchase order, any sales, use, consumption, value added or other goods/services based tax imposed by a state, county/local or other agency with jurisdictional authority is excluded from this order. Buyer is responsible for remitting any taxes that are applicable.
  - **c. Fees.** Madden Fabrication is not responsible for any fees and or expenses related to licensing, inspections and engineering as required by individual states or local governments.
- 2. Change Orders. All change orders must be signed by the buyer. Prices stated herein are valid for 1 month from the purchase order date, or two weeks from the purchase order date if unsigned, at which time Madden Fabrication may adjust its price if cost factors warrant. Additionally, any modifications to Madden Fabrication Portland Loo quote to customer, prior to formal approval, may result in a price adjustment. Any modification, to Madden Fabrication Portland Loo quote to customer, after formal approval, requested or required by Buyer for any reason shall be performed by Madden Fabrication at Buyer's expense, as follows: (i) Buyer shall submit a written description of the modifications to Madden Fabrication (ii) within 14 days of receipt of Buyer's description, Madden Fabrication shall provide to Buyer a written price quote for the modifications requested; (iii) Buyer shall pay the Change Order Invoice to Madden Fabrication in accordance with payment terms.
- 3. Terms of Delivery. Madden Fabrication will not be liable for any delay in the performance of orders or contracts, or in the delivery or shipment of goods, or for a damages suffered by the buyer by reason of such delay, when such delay is beyond Madden Fabrication control. All goods are shipped F.O.B. Portland, Oregon, which means that the risk of loss or damage to the goods and risk of delays in transit passes to the Buyer when the goods are duly delivered to the carrier at Portland, Oregon. Madden Fabrication has no control over arrival time of shipment, and shall not be responsible for delays in shipments once the goods leave Madden Fabrication plant.
  - **a. Procedures for Handling Products.** Madden Fabrication suggested procedures for handling products are as follows:

- All Madden Fabrication materials, whether palletized or separated from a pallet, must be handled per the instructions detailed in the Portland Loo Installation Procedures submitted with respect to the specified model of Portland Loo restroom facility or component.
- ii. All material received from, but not manufactured by Madden Fabrication must be handled per the specific handling instructions of the manufacturer of the material.
- iii. Proper handling equipment its supply and operation are strictly the responsibility of the Buyer.
- **4. Description of Products and Warranty.** The Portland Loo and all its associated components shall be warranted against defects in materials and workmanship for a period for not less than one year from date of final acceptance.
- **5. Time of Shipment and Delivery.** Unless otherwise specified on the purchase order, Madden Fabrication may ship goods pursuant to an order at any time after the goods are completed and ready for shipment. Further, unless payment has been made in advance, if a carrier holding a Madden Fabrication shipment order by a Buyer is ready to deliver the goods to the buyer, the Buyer agrees to accept the goods at the carrier's earliest possible delivery date and time.
- 6. Store & Invoice. If Buyer delays shipment, regardless of the reason for delay, Madden Fabrication is permitted to invoice and the Buyer accepts the obligation to pay Madden Fabrication under its agreed upon payment terms, using the date the order was ready for shipment as the invoice date. Once the order is invoiced, the materials shall become property of the agency/contractor. Further Madden Fabrication may at its sole discretion invoice the Buyer for a minimum of \$450 per month of on-site storage per Loo. Deliveries that are delayed by the Buyer may be canceled by Madden Fabrication and the goods returned to Madden Fabrication at its discretion. Any costs or difficulties arising from the Buyer's act in delaying receipt of Madden Fabrication's shipments are the complete responsibility of the Buyer. The Buyer agrees to pay for the complete shipment cost if Madden Fabrication elects to cause the goods to be returned to Madden Fabrication or delivered to another Buyer.
- 7. Cancellation. Mutual acceptance of the purchase order indicates notice to Madden Fabrication to proceed with the provisions of design service required in completing its fabrication of Portland Loo per this purchase order agreement. Should Buyer cancel its purchase order prior to granting Notice to Proceed in production of the Portland Loo, Buyer shall pay the design fee stated in the purchase order as compensation for design services rendered. Madden Fabrication requires the Buyer to indicate approval of its supply offering by executing the signature page of the Purchase order agreement document and Notice to Proceed. Upon granting Madden Fabrication approval of this purchase order agreement and Notice to Proceed, Buyer accepts responsibility for all costs incurred by Madden Fabrication in producing the Portland Loo for Buyer.

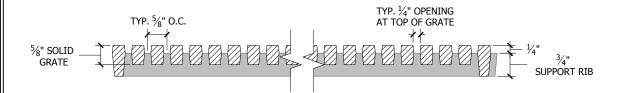
- **8. Special Orders.** All products sold by Madden Fabrication are custom to each particular job. Payments toward any product, once made are non-refundable.
- **9. Contract Documents.** Together with the Purchase Order, the following constitute the "Contract Documents" and the entire contract between the parties, either written or oral: (i) Approved "final" Madden Fabrication purchase order agreement and (ii) Change Order form (if applicable).
- **10. Attorney Fees.** If Buyer fails to pay any amount when due, and Madden Fabrication incurs any expenses in pursuant of collection, Buyer agrees to pay the reasonable attorney fees (whether or not litigation is commenced) and other costs of such collection.
  - a. In any dispute involving the interpretation or enforcement of this agreement or involving issues related to bankruptcy (whether or not such issues related to the terms of this agreement), the prevailing party shall be entitled to recover from the non-prevailing party reasonable attorney fees, paralegal fees, costs disbursements, and other expense incurred by the prevailing party in the dispute, including those arising before and at any trial, arbitration, bankruptcy, or other proceeding, and in any appeal or review thereof. In addition, the amount recoverable by the prevailing party shall include an amount estimated as the fees, costs, disbursement, and other expenses that will be reasonably incurred in collecting monetary judgment or award, or otherwise enforcing any order, judgment, award, or decree entered in the proceeding
  - b. This agreement shall be interpreted and enforced according to the laws of the State of Oregon. The parties irrevocably submit and consent to the jurisdiction of the Multnomah County circuit courts of the State of Oregon and the Oregon Federal District Court, with respect to litigation regarding any dispute, claim or other matter related to this contract.
- 11. Intellectual Property. Madden Fabrication makes and sells the Portland Loo under license from the City of Portland, Oregon. Aside from implied licenses sufficient to install and maintain the Portland Loo purchased by the Buyer under this Agreement, the Buyer's purchase of the Portland Loo shall not transfer any intellectual property rights pertaining to the Portland Loo, including but not limited to patent, trademark, and copyright rights in the design of the Portland Loo or in the name PORTLAND LOO. All such intellectual property rights shall remain owned by the City of Portland, subject to any licenses or assignments granted or executed by the City of Portland. The Buyer shall have no right to make copies of the Portland Loo, or to sublicense or otherwise commercially use any intellectual property associated with the Portland Loo.
- **12. Controlling Provisions.** The terms and conditions of this Purchase Order shall supersede and control any provisions, terms and conditions contained on any confirmation order, Purchase Order, or other writing the Buyer may give or receive, and the rights of the parties shall be governed exclusively by the provisions, terms and conditions thereof.
- **13. Binding Effect.** This Purchase Order agreement shall be effective and in force only when signed by Buyer and Madden Fabrication. Madden Fabrication must consent to any assignment of this Purchase Order agreement in writing. Subject to any restrictions upon assignment, this Purchase Order agreement shall be binding on and inure to the benefit of the heirs, legal representative, successors, and assigns of the parties.

- **14. Notice.** All notices required by this Purchase Order shall be in writing addressed to the party to whom the notice is directed at the address of that party set forth is this Purchase Order agreement and shall be deemed to have be given for all purposes upon receipt when personally delivered; one day after being sent, when sent by recognized overnight courier service; three days after deposit in United States Mail, postage prepaid, registered or certified mail; or on the date transmitted and received by facsimile. Any party may designate a different mailing address or a different person for all future notices by notice given in accordance with this paragraph.
- **15. Modification.** No modification of this Purchase Order agreement shall be valid unless it is in writing and is signed by all of the parties.
- **16. Interpretation.** The paragraph headings are for the convenience of the reader only and are not intended to act as a limitation of the scope or meaning of the paragraphs themselves. This agreement shall not be construed against the drafting party.
- **17. Severability.** The invalidity of any terms or provisions of the agreement shall not affect the validity of any other provisions.
- **18. Waiver.** Waiver of any party of strict performance of any provisions of this Purchase Order agreement shall not be a waiver of or prejudice any party's right to require strict performance of the same provision in the future or any other provision.
- **19. Counterparts.** This Purchase Order agreement may be executed in multiple counterparts, each of which shall constitute one agreement, even though all parties do not sign the same counterpart.

X	X/ /
Buyer's Authorized Representative	Date
X	X/ /
Portland Loo Representative	Date



Plan



Section A-A'

### SPECIFICATIONS

Material will be high quality 100% recycled grey iron; ASTM A48 class 35b or better; hardness 170-223 brinnell (unless specified otherwise; see below).

### Material:

- ☐ Grey iron ASTM A48 (standard)
- □ Aluminum, ASTM B26
- Ductile iron, (required for all load ratings higher than pedestrian)
   ASTM A536 class 65-45-12.
- □ Nickel bronze (ASTM B30)
- □ Bronze (ASTM B26)
- Finish will be natural patina of raw iron (unless specified otherwise; see below).

### Finish:

- □ Raw (standard)
- □ Rust conditioner
- □ Polyester Powder Coat\*
- □ Liquid Coat (wet paint)\*
  Color:
- \*Please specify standard UA color or mfr. name and color code.
- □ Brush (bronze/nickel/aluminum only)
- $\hfill \square$  Polish (bronze/nickel/aluminum only)
- □ Galvanized (grey iron and ductile iron only)

### □ Other: - Dimensions are nominal.

### Not

- 1) Grate is 1" thick at edge.
- 2) No openings greater than ¼", in conformance with ADA Accessibility Guidelines.
- 3) By default, the last grate in a trench drain will be sheared to meet a drain length specified at the time of order. Alternately, the trench drain length may be adjusted to the nearest whole grate (tolerances in the grate size WILL compound across the overall run). Please provide instructions in the comments section below.
- 4) 36.5 sq. in. open area per grate.
- 5) Grate weighs 14.5 lbs.

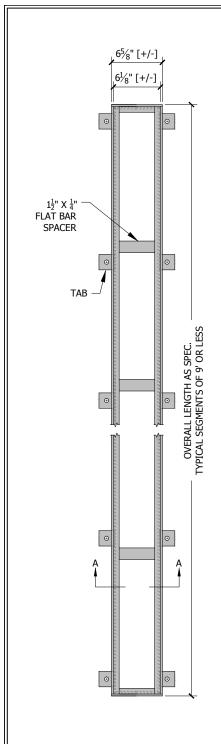
Comments:

### Trench Grate

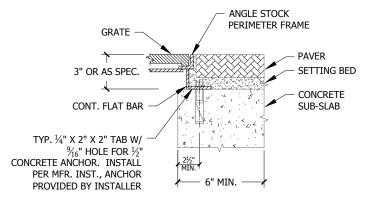
6" x 18" Jamsion

Page 1 of 1 Date: 2/26/13

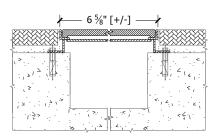




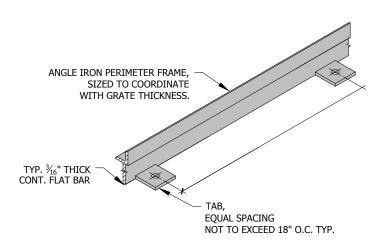
Plan



### **Detail Elevation A-A**



### **Elevation A-A**



### <u>Isometric</u>

### SPECIFICATIONS

- Frames are constructed of mild steel ASTM A36 (unless specified otherwise; see below).

### Material:

- □ Mild Steel ASTM A36 (standard)
- □ Stainless Steel grade 304L
- □ Architectural Bronze, ASTM B455
- □ Structural Aluminum, ASTM B221
- Finish will be natural patina of raw steel (unless specified otherwise; see below).

### Finish:

- □ Raw (standard)
- □ Polyester Powder Coat\*
- □ Liquid Coat (wet paint)\*
  Color:
- \*Please specify standard UA color or mfr. name and color code.
- □ Galvanized
- □ Other:
- Frame is load rated for pedestrian traffic only (unless specified otherwise; see below).

### Load Classifications:

- □ Pedestrian (standard)
- □ Light Vehicular
- □ H20/HS20
- (Additional steel support may be added for optional load classes. Please contact UA for revised cut sheet, as necessary.)
- Typical 1/8" horizontal gap between grate and frame. All visible welds to be ground smooth on outside edges. Frames will be true to square or diameter. Top of grate flush with grade of surrounding topping material (paver, concrete slab, etc.).
- Dimensions are nominal.

Comments:

### Trench Grate Frame

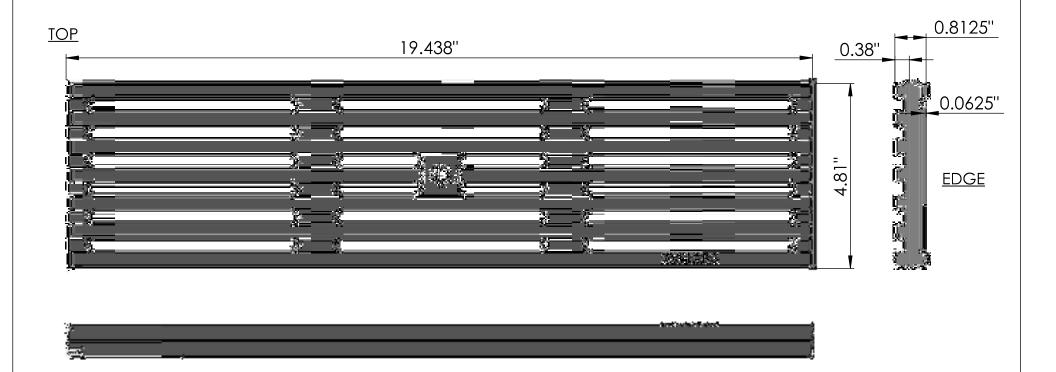
6" Wide Type "PA" Pedestrian Duty

Page: 1 of 1 Date: 5/22/12



### x3 Arrayed





2104 SW 152nd St.#4 TEL 206.276.0925 Burien, WA 98166 FAX 206.257.0318 Www.ironagegrates.com

Que 5"x20" Heel-Proof Trench Grate

JOB NO. DWG. NO. QUE.I.5x20\_Alum

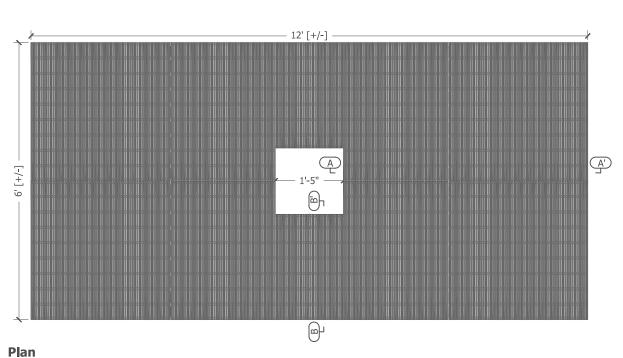
Drawn by: JH Date: 12/28/12 Scale: NTS

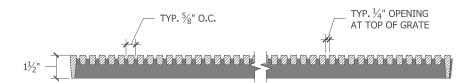
### NOTES:

- 2. 3. 4. 5.

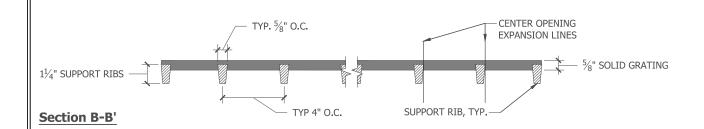
- Material: cast ductile iron
  Natural finish
  Edge thickness: 7/8"
  No openings greater than 1/4"
  Weight approx. <12lbs
  Fits drain bodies manufactured by:
  ABT® PolyDrain®, ACO™ K100/K100S/KS100, MEA® 1000 Series
  Due to casting inconsistencies all dimensions are nominal

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### Section A-A'



### SPECIFICATIONS

Material will be high quality 100% recycled grey iron; ASTM A48 class 35b or better; hardness 170-223 brinnell (unless specified otherwise; see below).

### Material:

- ☐ Grey iron ASTM A48 (standard)
- □ Aluminum, ASTM B26
- ➤ Ductile iron, (required for all load ratings higher than pedestrian) ASTM A536 class 65-45-12.
- □ Nickel bronze (ASTM B30)
- □ Bronze (ASTM B26)
- Finish will be natural patina of raw iron (unless specified otherwise; see below).

  Finish:

★ Raw (standard)

- □ Rust conditioner
- □ Polyester Powder Coat\*
- □ Liquid Coat (wet paint)\* Color:
- \*Please specify standard UA color or mfr. name and color code.
- □ Brush (bronze/nickel/aluminum only)
- □ Polish (bronze/nickel/aluminum only)
- ☐ Galvanized (grey iron and ductile iron only)

### □ Other: - Dimensions are nominal.

- 1) Cast in eight pieces.
- 2) Grate is 1-1/2" thick at edge.
- 3) No openings greater than  $\frac{5}{16}$ , in conformance with ADA Accessibility Guidelines.

### Comments:

### Tree Grate

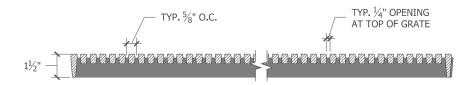
6' x 12' Jamison PN: Burlington

Page 1 of 4 Date: 3/29/18

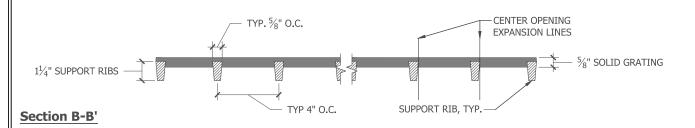


# 8' [+/-] @ 4@

### Plan



### Section A-A'



### SPECIFICATIONS

Material will be high quality 100% grey iron; ASTM A48 class 35b or better; hardness 170-223 brinnell (unless specified otherwise; see below).

### Material:

- ☐ Grey iron ASTM A48 (standard)
- □ Aluminum, ASTM B26
- ▼Ductile iron, (required for all load ratings higher than pedestrian) ASTM A536 class 65-45-12.
- □ Nickel bronze (ASTM B30)
- □ Bronze (ASTM B26)
- Finish will be natural patina of raw steel (unless specified otherwise; see below).

### Finish:

★ Raw (standard)

- □ Rust Conditioner\*
- □ Liquid Coat (wet paint)\*
  Color:
- \*Please specify standard UC color or mfr. name and color code.
- □ Brush (bronze/nickel/aluminum only)
- □ Polish (bronze/nickel/aluminum only)
- ☐ Galvanized (grey iron and ductile iron only)
- Other:
- Dimensions are nominal.

### Notes

- 1) Cast in eight pieces.
- 2) Grate is 1- ½" thick at edge.
- 3) No openings greater than  $\frac{5}{16}$ ", in conformance with ADA Accessibility Guidelines.

### Comments:

### Tree Grate

8' x 16' Jamison PN: Burlington

Page 2 of 4 Date: 3/29/18



### PERIMETER FRAME C4 X 7.25 REMOVABLE CROSS SUPPORT TACHMENT TAIL 1 FLAT BAR SADDLE S6 x 12.5 AM CROSS SUPPORT [÷] SQ. TYP., SIZED TO **Detail 1** COORDINATE WITH 6'-05%" -01/8" REE OPENIN C4 X 7.25 REMOVABLE CROSS SUPPORT ATTACHMENT DETAIL 2 3" x 2" FLAT BAR REMOVABLE CROSS SUPPORT 1" x 1" x $\frac{1}{4}$ " ANGLE BOLTING TAB. (BOLT ATTACHMENT ON ONE END, WELD ATTACHMENT ON OTHER.) **Detail 2** Plan ANGLE STOCK PERIMETER FRAME, SIZED TO COORDINATE WITH GRATE THICKNESS ANGLE STOCK PERIMETER FRAME GRATE FRAME HEIGHT VARIES PER GRATE THICKNESS. SETTING BED TYP. 3/16" x 2" CONT. FLAT BAR SPECIFY IF CRITICAL #3 REBAR EMBEDMENT ANCHOR, CONCRETE EQUAL SPACING CONT. FLAT BAR SUB-SLAB NOT TO EXCEED 18" O.C. TYP. TYP #3 REBAR **P Isometric** EMBEDMENT ANCHOR 6" TYP. OVERALL LENGTH 6" MIN. P Elevation ANGLE STOCK PERIMETER FRAME ANGLE STOCK PERIMETER FRAME, SIZED TO COORDINATE WITH GRATE THICKNESS. - CONCRETE SLAB TYP. #3 REBAR EMBEDMENT ANCHOR 6" TYP. OVERALL LENGTH #3 REBAR EMBEDMENT ANCHOR, NOT TO EXCEED 18" O C TYP **S Elevation S** Isometric

### SPECIFICATIONS

- Frames are constructed of mild steel ASTM A36 (unless specified otherwise; see below).

### Material:

★Mild Steel ASTM A36 (standard)

- □ Stainless Steel grade 304L
- □ Architectural Bronze, ASTM B455
- □ Structural Aluminum, ASTM B221
- Finish will be natural patina of raw steel (unless specified otherwise; see below).

### Finish:

★Raw (standard)

- □ Polyester Powder Coat\*
- □ Liquid Coat (wet paint)\*
  Color:
- \*Please specify standard UA color or mfr. name and color code.
- □ Galvanized
- Other:
- Frame is load rated for pedestrian traffic only (unless specified otherwise; see below).

### **Load Classifications:**

- □ Pedestrian (standard)
- □ Light Vehicular
- ¥H20/HS20

(Additional steel support may be added for optional load classes. Please contact UA for revised cut sheet, as necessary.)

- Typical 1/8" horizontal gap between grate and frame. All visible welds to be ground smooth on outside edges. Frames will be true to square or diameter. Top of grate flush with grade of surrounding topping material (paver, concrete slab, etc.).
- Dimensions are nominal.

Comments: I-Beams are welded

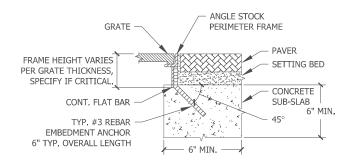
### Tree Grate Frame

6' x 12' Combo Type PN: Burlington

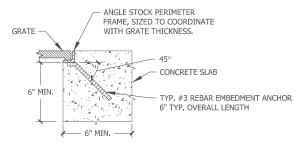
Page: 3 of 4 Date: 3/30/18

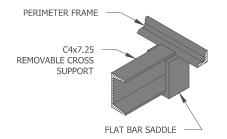


## 16'-0 \$" [+/-] 16'-0 \$" [+/-] ATTACHMENT DETAIL 1 ISLANDING TO DETAIL 1 ATTACHMENT DETAIL 1 ATTACHMENT DETAIL 2 Plan 2 Pieces

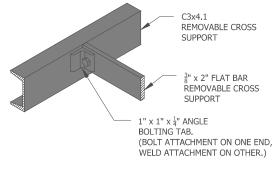


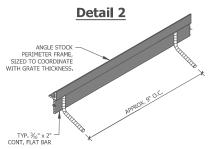
### "P" Elevation



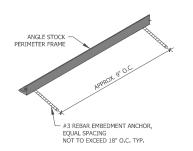


### **Detail 1**





### **P Isometric**



### **S Isometric**

### SPECIFICATIONS

 Frames are constructed of mild steel ASTM A36 (unless specified otherwise; see below).

### Material:

★Mild Steel ASTM A36 (standard)

- □ Stainless Steel grade 304L
- □ Architectural Bronze, ASTM B455
- □ Structural Aluminum, ASTM B221
- Finish will be natural patina of raw steel (unless specified otherwise; see below).

### Finish:

★ Raw (standard)

- □ Polyester Powder Coat\*
- □ Liquid Coat (wet paint)\*
  Color:
- \*Please specify standard UA color or mfr. name and color code.
- □ Galvanized
- □ Other:
- Frame is load rated for pedestrian traffic only (unless specified otherwise; see below).

### **Load Classifications:**

- □ Pedestrian (standard)
- □ Light Vehicular
- ¥H20/HS20

(Additional steel support may be added for optional load classes. Please contact UA for revised cut sheet, as necessary.)

- Typical 1/8" horizontal gap between grate and frame. All visible welds to be ground smooth on outside edges. Frames will be true to square or diameter. Top of grate flush with grade of surrounding topping material (paver, concrete slab, etc.).
- Dimensions are nominal.

Comments: I-Beams are Welded

### **Tree Grate Frame**

8' x 16' Type Combo "S"/"P" PN: Burlington

Page: 4 of 4 Date: 3/30/18





### **Center Opening Expansion Instructions**

- Locate appropriate knock out ring location.
- With circular grinder, score the top and bottom of the casting at least 1/4 through the total thickness in all locations required for center expansion.
- Gently tap the portion of the grate you wish to remove until grate breaks at the score locations.
- After center is removed, grind the inside face the tree grate smooth to remove any excess metal.

### Section 32 94 43 Tree Grates

### **PART 1 GENERAL**

### 1.1 SECTION INCLUDES

A. Tree Grate and installation frames.

### 1.2 SUBMITTALS

- A. Contractor shall submit \_\_\_\_\_ set(s) of drawings of tree grates and frames for review by architect prior to purchase and installation.
- B. Contractor submittal shall include full scale proof of "Historic Route Solana Beach" emblem.

### 1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 25 years tree grate manufacturing experience.
  - a. Castings will be squared and flat, free of burrs, slag, air pockets, blow holes, flashing and grinding or welding on exposed surfaces. Excessive warping or shrinkage is not acceptable.
  - b. All visible welds on installation frames to be ground smooth. Frames will be true to specified diameter.
- B. Installer qualifications: 2 years minimum experience installing tree grates and support frames.

### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Inspect material immediately upon delivery, noting on delivery receipt all damage and/or discrepancy between delivered material and packing slip
- B. Store product in manufacturer's packaging until ready to install.

### 1.5 WARRANTY

A. Tree grates and frames shall be warranted by the Manufacture against defects in materials and workmanship for a minimum of one (1) years

### **PART 2 PRODUCTS**

### 2.1 TREE GRATES AND FRAMES:

- A. Manufacturer: Tree Grates and Frames shall be as supplied by Urban Accessories, Inc., 465 East Fifteenth Street, Tacoma, WA 98421 - PH: (253) 572-1112 or sales@urbanaccessories.com.
- B. Tree Grates shall be: \_\_\_\_\_\_ [Style and Size], as per drawings.

- Tree Grate material shall be high quality, 100% recycled, cast grey iron, per ASTM A48 class 35b or better; hardness 170-223 brinnell. [Other Options Available]
- b. Finish on Tree Grates shall be Raw Natural Finish. [Other Options Available]
- C. Tree Grate Frames shall be Type "S" Frames, for embedded installation into new concrete surround.
  - Tree Grate Frame material shall be mild steel angle iron and other shapes as necessary, per ASTM A36
  - b. Finish on Tree Grate Frames shall Raw Natural Finish

### PART 3 EXECUTION

### 3.1 EXAMANATION

- A. Do not begin installation until site is properly prepared.
- B. If substrate preparation is the responsibility of another trade, please coordinate with and notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPERATION

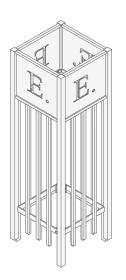
- A. Clean surfaces thoroughly prior to installation
- B. Prepare surface as needed to perform installation per manufacturer's recommendation.

### 3.3 INSTALLATION

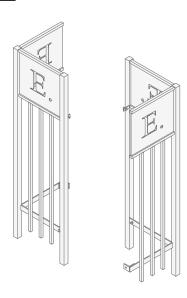
- A. Install tree grates in relation to adjacent paving surface with uniformity of appearance, in locations as indicated on plans.
- B. Install tree grate frames by incorporating them into the tree pit forming material, taking care to insure that the frame is on an FLAT PLANE, and sufficient bracing is in place to prevent frame deformation during concrete pouring and curing.
- C. Clean concrete debris from tree grate frame.
- D. Install tree grate, grinding leveling pads and shimming as needed to hold tree grates level and prevent rocking. Gap between grate and frame in finished installation shall not exceed 1/8" on all sides.

### **END OF SECTION**

# Elevation **Plan View**



# **Isometric**



**Exploded Isometric** 

#### SPECIFICATIONS

- Cast components will be of 100% recycled aluminum; ASTM B261.
- Castings will be squared and flat, free of burrs, slag, air pockets, blow holes, flashing, and grinding or welding on exposed surfaces. Excessive warping or shrinkage is not acceptable.
- Fabricated components will be mild carbon steel, ASTM A36.
- All visible welds to be ground smooth on outside edges.
- Fabrication will be true to square, or diameter and sized within 1/8".
- Finish to be powder coat, standard UA color and applied per UA specifications. If alternate color or finish is required, please provide all finish information for UA approval.
- Dimensions shown are nominal.
- For cases of "or equal" consideration, our finished, full size product should be compared with the alternative product for general quality, surface finish, precise pattern work, metal characteristics, and overall design aesthetics.

# Tree Guards

Any Street

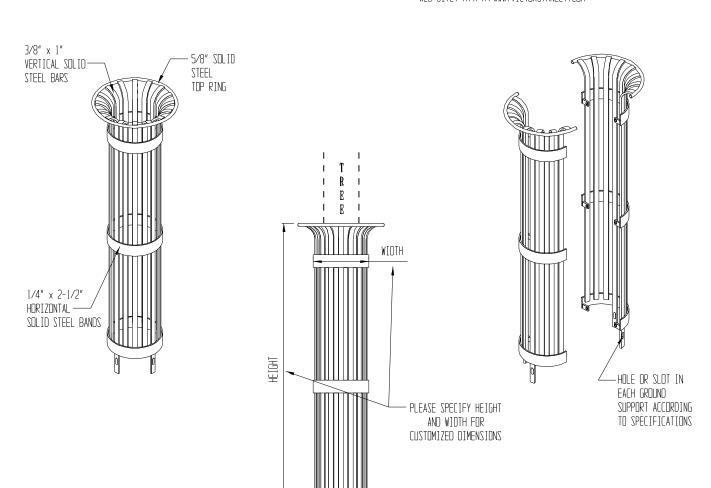
Page: 1 of 1 Date: 8/13/13



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P.O. DRAWER 330 - DUNKIRK, MD 20754 USA TOLL FREE: (800) 368-2573 (USA & CANADA) TEL (301) 855-8300 - FAX (410) 257-7579 WEB SITE: HTTP://WWW.VICTORSTANLEY.COM



AVAILABLE OPTIONS:

POWDER COATING

10 STANDARD COLORS, CUSTOM COLORS (INCLUDING THE RAL RANGE)

WIDTH & HEIGHT
CUSTOM HEIGHT AND WIDTH: PLEASE SPECIFY FOR CUSTOMIZED DIMENSIONS

#### NOTES

- 1. DRAWING NOT TO SCALE. DO NOT SCALE DRAWINGS.
- 2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-CDATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH COAT AVERAGES 8-10 MILS (200-250 MICRONS).
- 3. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
- 4. ANCHOR BOLTS PROVIDED BY OTHERS.
- 5. FOR HIGH SALT ABUSIVE CLIMATES, HOT DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. SEE WRITTEN SPECIFICATIONS FOR DETAILS.
- 6. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
- 7. THIS PRODUCT IS SHIPPED PARTIALLY UNASSEMBLED.



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# SECTION 129300 (02870) SITE FURNISHINGS

# PART 1 GENERAL

Model: S-6

#### 1.1 DESCRIPTION

A. Section includes information, materials, and options for products manufactured by Victor Stanley, Inc. All specifications are subject to change. Contact manufacturer for details.

#### 1.2 SUBMITTALS

- A. Specifications Drawing: Detail drawing of product including overall dimensions and options.
- B. Samples: Various component samples available upon request.
- C. Qualifications: Installer must submit evidence of a successful installation history with comparable materials and designs specified.

## 1.3 DELIVERY, STORAGE, and HANDLING

- A. Delivery: Deliver products to site in manufacturer's original, unopened containers and packaging. Upon delivery, examine packages immediately to ensure all products are complete and undamaged.
- B. Storage: Store products in a protected, dry area in manufacturer's unopened containers and packaging.
- C. Handling: Protect product's finish from damage during handling and installation.

# 1.4 COORDINATION

- A. Coordinate with site work and other appropriate sections of the specifications to maintain proper provisions of the work specified.
- B. All site furnishings shall be laid out in the field and approved prior to installation.

## PART 2 PRODUCTS

# 2.1 MANUFACTURER

A. Victor Stanley, Inc.

P.O. Drawer 330

Dunkirk, MD 20754 USA

Toll Free: (800) 368-2573 (USA & Canada) Tel: (301) 855-8300 Fax: (410) 257-7579

E-mail: sales@victorstanley.com

Web site: http://www.victorstanley.com

#### 2.2 TREE GUARD

A. Type: Model S-6 from the Ironsites<sup>®</sup> Series



## 2.3 MATERIALS

A. 3/8" x 1" (10mm x 25mm) vertical solid steel bars; 1/4" x 2-1/2" (6mm x 64mm) horizontal solid steel bands; 5/8" (16mm) solid steel top ring, 3/8" x 1" (10mm x 25mm) anchor tabs.

# **OPTIONS**

- A. Standard colors: VS Bronze, VS Black, VS Green, VS Tavern Square Green, VS Teal, VS Blue, VS Burgundy, VS Red, VS White, VS Gray (custom colors available, including the RAL range.)
- B. Custom height and width please specify.

# 2.4 FINISHES

- A. All fabricated metal components are steel shotblasted, etched, phosphatized, preheated, and electrostatically powder-coated with TGIC polyester powder coatings. Products are fully cleaned and pretreated, preheated and coated while hot to fill crevices and build coating film. Coated parts are fully cured to coating manufacturer's specifications. The thickness of the resulting finish averages 8-10 mils (200-250 microns).
- B. In high salt abusive climates, hot-dip galvanizing before powder coating is available. Hot-dip galvanizing is performed for Victor Stanley, Inc. by an experienced qualified firm to which products are shipped for galvanizing. Hot-dip galvanizing includes an aggressive pre-treatment and immersion in a tank of charged liquid zinc at or around 860°F (460°C). The resulting surface is resistant to rust but has some unevenness resulting from the bonding of the zinc to the steel surface. As a result, the powder-coating surface finish over that galvanized surface may exhibit bumps, unevenness, and may not be as smooth as Victor Stanley, Inc.'s standard finish; this uneven and inconsistent finish is normal for hot-dip galvanizing. Most fabricated metal components and castings can be hot-dip galvanized, please contact manufacturer for details.

## **PART 3 EXECUTION**

# 3.1 INSTALLATION

A. This Victor Stanley, Inc. product must be permanently affixed to the ground. Consult your local codes for regulations.

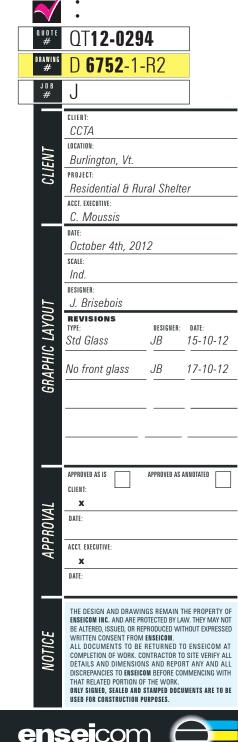
## 3.2 PROTECTION

A. Protect products prior to installation by having them remain in the manufacturer' Packaging and container.

# 149 1/2" ITEM 1 · 11' LONG SHELTER 131 1/2" - Foot print RESIDENTIAL / RURAL MODEL Shelter structure fabricated all in aluminum: 43 11/16" 44 1/4" 43 11/16" $31/2'' \varnothing$ custom post extrusion 6061-T6 $31/2'' \varnothing$ custom torsion bars extrusion 6063-T5 3/8" thk machined aluminum plate 6061-T6 Aluminum components of shelter received metallic silver #PM211S11 powder coat paint. € 10 1/2" Ajustable legs for leveling in galvanised steel. All fasteners to be stainless steel or hot dipped galvanized structural bolts A325. %" thk tempered glass panels with silver "CeraFrit" safety strips on rear & sides. New concrete pad Foot 3/16" thk cold form greenish "UV" polycarbonate roof with aluminum trim on front & rear edges 58 84" Shelter supplied with following items: 26 3/8" x 58 3/8" Solar panel (1) 6W / 12V MR16 LED lamp c/w (4) batteries controller & 135w solar panel. Ligthing active until dusk to dawn · (2) Double seated gray molded plastic benches · New concrete pad required 84" x 155 1/2" ( minimum size) Standard rear glass panels Non-standard side glass panels $\hat{\Gamma}$ 128" - Front Openning TOP VIEW 135W Solar Panel **Batteries** 6W MR16 LED lamp Aluminum box c/w hinged cover SECTION "A-A" • 3/4" = 1'-0" 149 1/2" Œ 9" 84" 9" 131 1/2" 10 1/2" 4 58" 41 3/8"- Rear glass 43 7/8"- Rear glass 41 3/8"- Rear glass 87 New concrete pad 84"- Minimum Pad 155 1/2"- Minimum Pad

FRONT ELEVATION • Scale: 3/8" = 1'-0"

**SIDE ELEVATION** • Scale: 3/8" = 1'-0"



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# ITEM 2 · 8' LONG SHELTER RESIDENTIAL / RURAL MODEL

Shelter structure fabricated all in aluminum:  $31/2'' \varnothing$  custom post extrusion 6061-T6  $31/2'' \varnothing$  custom torsion bars extrusion 6063-T5 3/8" thk machined aluminum plate 6061-T6 Aluminum components of shelter received metallic silver #PM211S11 powder coat paint.

Ajustable legs for leveling in galvanised steel. All fasteners to be stainless steel or hot dipped galvanized structural bolts A325.

%" thk tempered glass panels with silver "CeraFrit" safety strips on rear & sides.

3/16" thk cold form greenish "UV" polycarbonate roof with aluminum trim on front & rear edges

Shelter supplied with following items:

- (1) 6W / 12V MR16 LED lamp c/w (4) batteries controller & 135w solar panel. Ligthing active until dusk to dawn
- · (1) Double seated gray molded plastic benches

84"

58"

84"- Minimum Pad

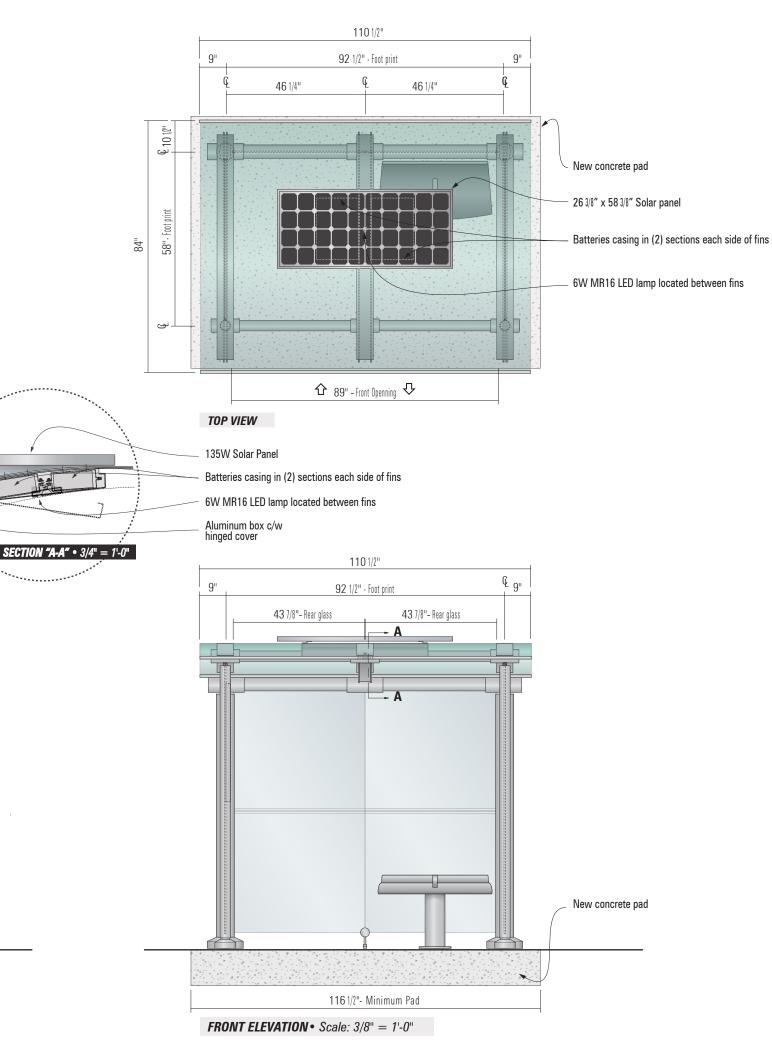
**SIDE ELEVATION** • Scale: 3/8" = 1'-0"

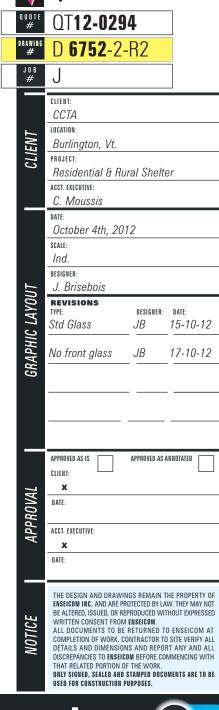
- · New concrete pad required 84" x 116 1/2"
- ( minimum size)

10 1/2" 4

87

Standard rear glass panels
Non-standard side glass panels







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# MODEL S 080 CANTILEVER SHELTER SOLAR POWERED SECURITY LIGHT

Shelter structure fabricated all in aluminum:  $6" \varnothing$  custom post extrusion 6061-T6  $31/2" \& 41/2" \varnothing$  custom torsion bars extrusion 6063-T5 3/8" thk machined aluminum plate 6061-T6 Aluminum components of shelter received metallic silver #PM211S11 powder coat paint.

3/8" thk tempered glass panels with silver "CeraFrit" safety strips on rear & sides.

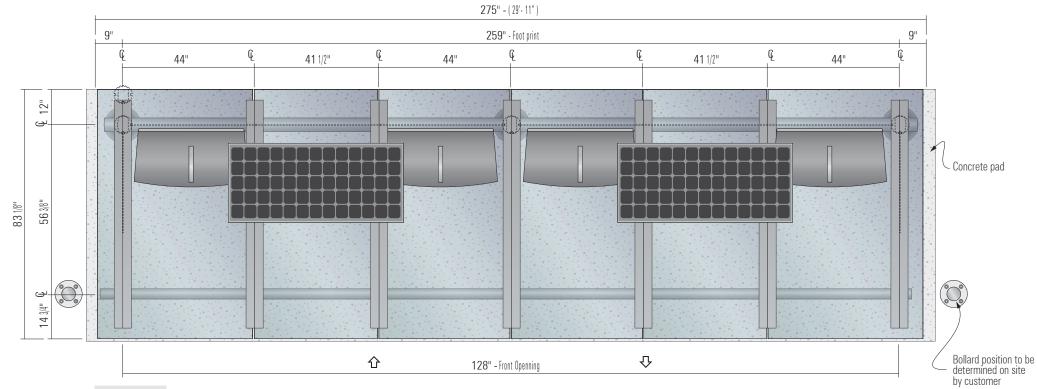
3/8" thk laminated & heat-strenghted glass roof.

Shelter supplied with following items:

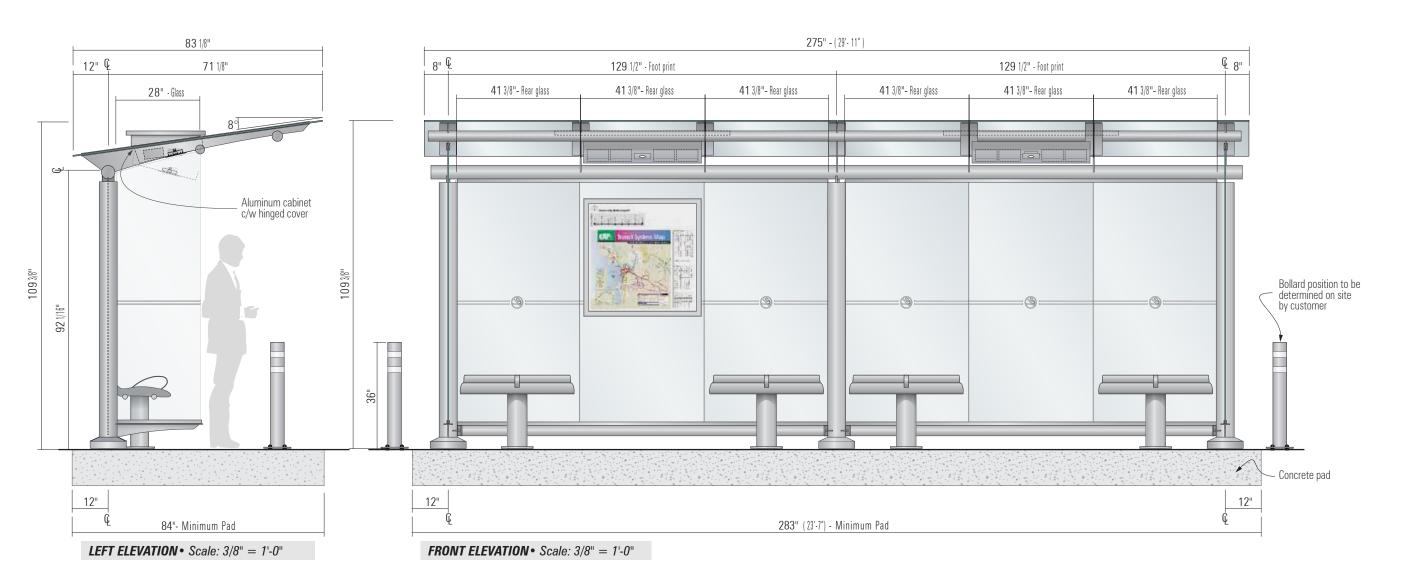
- (1) 12V 6 W LED cluster fixture c/w (4) batteries, controller & 135W solar panel (5 days of autonomy).
- · (4) Double seated gray molded plastic bench
- (1) 39 5/16" x 33 5/16" D/F map frame with tempered glass face for 36" x 36" visual.
- (2) Aluminum bollard c/w (2) 3M white reflective vinyle stripes.
   Bollard position to be determined on site by customer

# NOTE:

- · New concrete pad required 84" x 283" (minimum size).
- · Standard rear glass panels 41 3/8" x 81 1/16"
- · Non-standard side glass panels.



TOP VIEW



CLIENT: CCTA LOCATION: Burlington, Vt. PROJECT: Shelter S 080 ACCOUNT JP Chauvin EXECUTIVE: DATE: 2015, March 26th, SCALE: Ind. DESIGNER: J. Brisebois REVISION: 28" side glass | 1 | JB | 2015/03/30

**QT** 14-0072-A

**D** 7102-2-R1

**J** 0000

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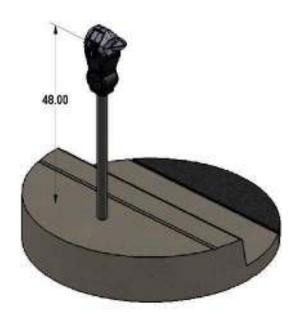
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225, Norman Montréal Québec Canada H8R 1A3



# **Height Limitation for Mounting Single-Space Meters**

- Installation Guide 100-022 Rev. A



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858.568.7648   support@ipsgroupinc.com www.ipsgroupinc.com   www2.ipsmetersystems.com

# **REVISION HISTORY**

Revision	Date	Description
А	March 2016	Initial release

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# CHAPTER 1 | INTRODUCTION

This document details the maximum mounting-pole height limitations for mounting an IPS Group Inc.'s Single-Space parking meter. Specifically it provides maximum mounting-pole height measurements to use when mounting each of the following total assemblies:

- Single-Space with small vault
- Single-Space with large vault
- Yoke mounted with small vault
- Yoke mounted with large vault

# 1.1 ADA regulation

The Americans with Disabilities Act (ADA), Section 308.2.1 (Forward reach, Unobstructed. Revised in 2010), states the maximum height for a parking meter's control panel is 48 inches (or 4 feet) above ground. Therefore regardless of the height of the total assembly, the mounting-pole's height must be reduced enough to ensure the meter's control panel does not exceed 48 in.

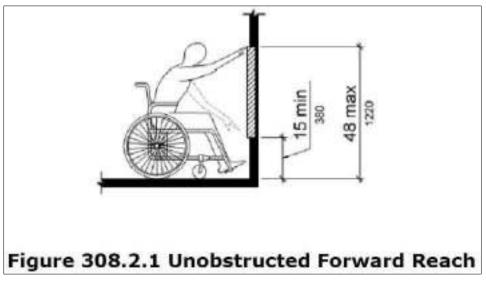


Figure 1-1: ADA, Section 308.2.1 - Unobstructed forward reach requirement

# CHAPTER 2 | MAXIMUM POLE-HEIGHT LIMITATION

IPS Single-Space parking meters vary in height, depending on the coin vault being used. This coin vault height can dictate the maximum mounting-pole height allowable during installation (i.e. meter + vault). Additionally, the use of an IPS Single-Space Meter Yoke adds to the overall height of the total assembly (i.e. meter + vault + Yoke). Therefore, depending on the specific application, a mounting-pole's height must be reduced enough to ensure the installation satisfies ADA requirements.

Figure 2-1: Single-Space Meter Yoke

# 2.1 Pole height by application

Table 2-1 lists the approximate total assembly height of specific applications. Figure 2-2 thru Figure 2-5 show the maximum mounting-pole height allowable for each application.

**Note** = 48 in. is the <u>maximum</u> allowable height. Therefore, reduce/cut the mounting-pole ~1 in. <u>more</u> than the indicated height to ensure the final height is below 48 in. There is no penalty for a control panel height from 15 in. – 48 in.

Application height, Single-Space ADA height req. -Maximum application Application height (in.) pole height (in.) approx. (in.) 33.90 in. SS + small vault = 14.10 in.48.00 - 14.10 in. = 32.00 in. = 16.00 in.SS + large vault 48.00 – 16.00 in. = 30.50 in. SS +small vault + Yoke = 17.50 in.48.00 - 17.50 in. = 28.90 in. SS + large vault + Yoke = 19.10 in.48.00 - 19.10 in. =

Table 2-1: Approximate total assembly heights

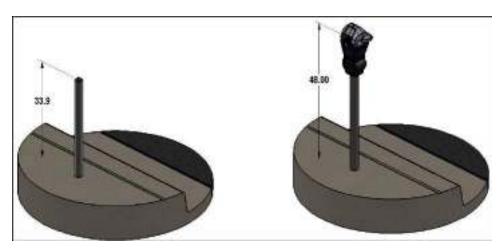


Figure 2-2: Single-Space meter + small vault

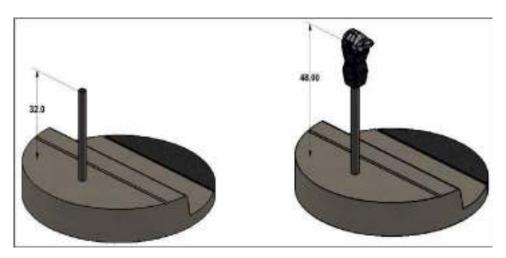


Figure 2-3: Single-Space meter + large vault

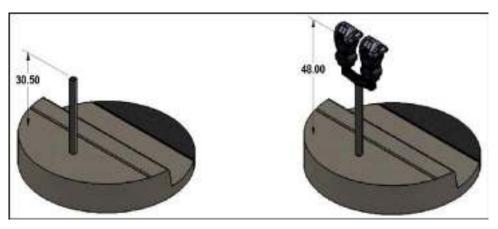


Figure 2-4: Single-Space meter + small vault + Yoke

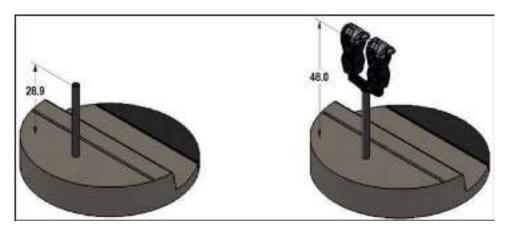


Figure 2-5: Single-Space meter + large vault + Yoke



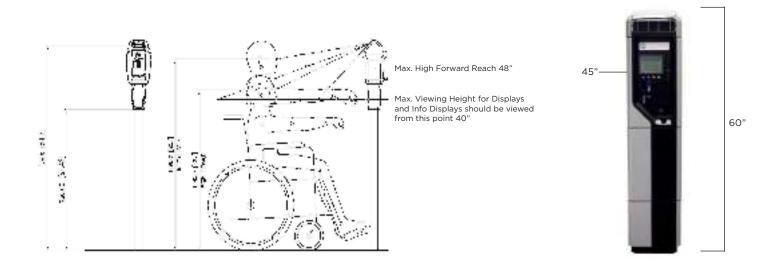
# ADA CERTIFICATION

The MS1 Multi-Space Pay Station and M5<sup>™</sup> Single Space Parking Meter are compliant with the Federal Americans with Disabilities Act (ADA).

- -The pay station screen is positioned at a height of 45"
- -IPS meters are ADA compliant as long as the meter poles are cut to the appropriate heights.

ADA - "The force required to activate operable parts shall be 5 pounds (22.2 N) maximum."

The MS1 and M5<sup>™</sup> key buttons complies with this requirement. The force to operate the key buttons is typically equal or less than one pound.





Wheelchair accessible IPS meters in the City of Columbus,  $\ensuremath{\mathsf{OH}}$ 





# QUICK AND EASY TO INSTALL



Step 1: Unlock the Meter.



METER BETROFIT:

Step 2: Remove the Dome and



Step 3: Install RFID tag.



Step 4: Install IPS Dome and Mechanism.



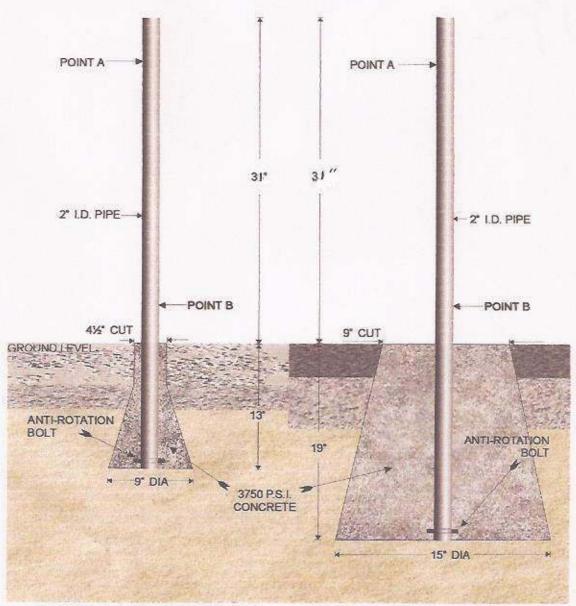
Step & Lock the Meter.



ŝtep é: Instal complete.



Note:- 1/2" holes to be drilled into one side (not through) pipe at Points A & B to release any water build-up and create air circulation.

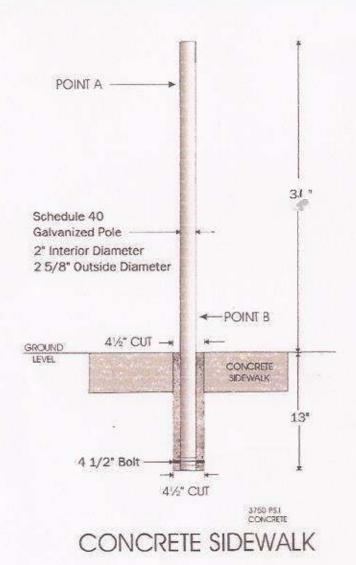


CONCRETE SIDEWALK

**BOULEVARD or ASPHALT** 

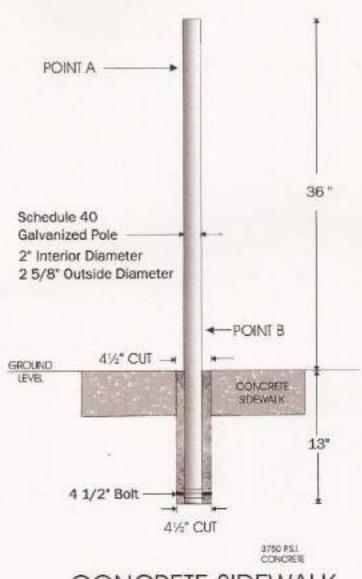
# Schedule 40 Galvanize Pole 2" I.D. 2 5/8" O.D.

Note:- 1/2" holes to be drilled into (<u>not through</u>) pipe at Points A & B to release any water build-up and create air circulation.



# Schedule 40 Galvanize Pole 2" I.D. 2 5/8" O.D.

Note:- 1/2" holes to be drilled into (<u>not through</u>) pipe at Points A & B to release any water build-up and create air circulation.



CONCRETE SIDEWALK